

1998

## The perceived role of the clinical nurse educator in New South Wales

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Dillon, Michelle, The perceived role of the clinical nurse educator in New South Wales, Master of Nursing (Hons.) thesis, Department of Nursing, University of Wollongong, 1998. <https://ro.uow.edu.au/theses/2608>

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**The Perceived Role  
of the  
Clinical Nurse Educator  
in  
New South Wales**

**A thesis submitted in fulfillment  
of the requirements for the award  
of the degree**

**MASTER OF NURSING (HONOURS)  
From  
THE UNIVERSITY OF WOLLONGONG**

**by**

**Michelle Dillon (GDip.Nursing).**

**Department of Nursing 1998**

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and to the best of my knowledge and belief it does not contain any material previously published or written by another person where due reference is not made in the text.

Signed .....

# ACKNOWLEDGMENTS

My sincere thanks and deep appreciation must go to Ms Judith Leacock, my supervisor, for sharing her knowledge, considerable skills and time so freely during the duration of this research study. Ms Leacock has supported and encouraged me throughout the last two and half years, and has given generously of her own time. Her encouragement and enthusiasm for the research study never waned, and in turn fed my enthusiasm for the study and for nursing research.

I would like to thank all of the Clinical Nurse Educators and experts who participated in the research study and who gave so willingly of their time and ideas. Without them the research would not have been possible.

My gratitude is also extended to Adam my Husband, for his understanding and continual support throughout the long process of completing this research project. His continual encouragement ensured that this project was finished.



# ABSTRACT

This study is concerned with defining the role of the Clinical Nurse Educator [CNE] in New South Wales [NSW] through the development of a set of competencies. The CNE is a nursing position that is unique to NSW. Anecdotal evidence and relevant literature points towards a lack of clear definition and delineation of the CNE role from other nursing roles.

The CNE role was defined by developing a set of competencies that clearly demonstrate the essential attributes, skills and knowledge that a CNE needed in order to fulfill the role. The competencies were generated from a panel of experts and then validated by practicing CNEs. An extensive literature review supported the need for this research. A list of the competencies generated by the research project is given at the end of Chapter Four, Research Results. The 20 competencies have been divided into 6 domains of practice, which reflect their main theme. These domains are:

1. Clinical Domain
2. Education Domain
3. Management Domain
4. Interpersonal Domain
5. Professional Domain
6. Reflective Domain

Six pre-requisites required for the role of the CNE were also generated from this research study. They are:

1. Registered Nurse
2. Evidence of continuing education
3. Post Basic Certificate in area of Specialty
4. Post Graduate Certificate in nursing education or
5. Post Graduate Diploma in education
6. 3-5 years clinical experience

The methodology for the study was a combination of quantitative and qualitative methods. The first part of the study consisted of the Delphi Technique with the use of a 20 member expert panel.

Two rounds were required to be used with this technique. The experts were required to generate a list of competencies/skills that they perceived were essential for the role of the CNE and then to rank them in levels of significance. The second part of the study consisted of a survey of 30 practicing clinical educators who were given the competencies developed by the expert panel and requested to identify what was required by them to fulfill their role.

This study has resulted in the development of 20 competency statements and six pre requisite statements that define and delineate the role of the CNE in NSW. These statements can be used to describe the role and to assist with the selection of individuals for the role.

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## DEFINITION OF TERMS

RN	Registered Nurse
NSW	New South Wales
UK	United Kingdom
CI	Clinical Instructor
CF	Clinical Facilitator
CNT	Clinical Nurse Teacher
CNE	Clinical Nurse Educator
CT	Clinical Teacher, title used in the United Kingdom
NSWNA	New South Wales Nursing Association
NE	Nurse Educator
TENs	Trainee Enrolled Nurse
CNS	Clinical Nurse Specialist
CNC	Clinical Nurse Consultant
NUM	Nursing Unit Manager
ANRAC	Australian Nurse Registering Authorities Conference
ANCI	Australian Nursing Council Inc.
NOOSR	National Office Overseas Registration
NTB	National Training Board
ITAB	State Industry Training Advisory Board
ASF	Australian Standards Framework
CACCN	Confederation of Australian Critical Care Nurses
ANTS	Australian Nurse Teachers Society
ANF	Australian Nurses Federation
NNO	National Nurses Organisation

# **CHAPTER 1**

## **Introduction**

### ***1.0 Introduction***

This research study is designed to examine the role of the Clinical Nurse Educator (CNE) in New South Wales (NSW). The aim of the study is to define the role of the CNE in NSW by generating and validating the competencies required by an individual to perform the role. This introductory chapter is divided into the following sections:

1. Background to the research study;
2. Significance of the study;
3. Key research questions;
4. Outline of the research study.

In the background to the research study the general purpose and aims of the study will be described and relevant literature will be examined. Literature relevant to nursing education, nursing as a practice based discipline, clinical education and its importance as well as internal analysis, role theory and competencies will be discussed. In section two, the significance and anticipated impact of the study will be discussed. In section three, four main research questions examined in the study will be explored. Section four will discuss the setting of the research study and provide a brief outline of the thesis.

### ***1.1 Background to the Research Study***

In 1991, Morgan (p. 1241) stated that one of the biggest weaknesses within the profession of nursing was the lack of clarity in regard to the role of the clinical educator. Clinical educators performing different roles and experiencing role confusion and role strain demonstrated this lack of clarity according to Morgan. To achieve clarity about a role, a role must be defined and delineated from other roles. Within the nursing profession in NSW there are two clinical teacher roles: The Clinical Facilitator role (CF); and the Clinical Nurse Educator role (CNE).



The CF is employed by the tertiary sector to educate students of nursing in clinical areas, and the CNE is employed by the service sector (health care facilities) to educate qualified or registered staff in clinical areas.

Employers determine the nature of these separate roles. Research into the CF role and surrounding issues has been carried out over the last decade by numerous nursing researchers. In Australia this includes; Hart and Rotem in 1994; Howie in 1988; and Horsfall in 1990. In the United Kingdom (UK) similar relevant research includes work carried out by, Craddock in 1993 and Crotty in 1993. Research has also been undertaken in the United States of America (USA) by researchers such as Nehring in 1990 and del Bueno, Griffin, Burke and Foley in 1990.

No research into the specific CNE role appears to have been undertaken at the present time by any member of the nursing profession. It is difficult to ascertain if the CNE role is performed in other countries such as the UK or the USA, or even in other states of Australia due to many factors. These factors include the use of different terminology to describe nursing roles and the different methods of educating nurses internationally.

The necessity for defining a role is quite evident. Without a comprehensive and well-articulated role definition the incumbent of a role will suffer role ambiguity and role strain (Gerrish 1990, p. 200). Gerrish (1990) states that role ambiguity can lead to work related stress, role conflict and decreased role performance and productivity. Therefore for an individual to adequately perform a role it is necessary for them and their colleagues to be aware of the expectations of the role, and the specific scope of practice for the role.

In 1989a, Duffield (p. 16) stated that 'a role can be delineated and defined by identifying skills or competencies which are expected of people within that role.' It would therefore logically follow that after identifying competencies, the incumbent of a role and major stakeholders can then define that role and delineate it from other roles. This research study will identify the competencies that stakeholders, such as employers of CNEs, perceive are required by an individual to fulfill the role of a CNE. These competencies will then be validated by practicing clinical educators to ensure they are an accurate reflection of the requirements of a role.

## ***1.2 Significance of the Study***

Cameron (1989) (cited in Gray & Pratt 1991 {eds.} p. 220) states that there are many advantages to defining competencies for a specialty within nursing.

These advantages are assistance with the definition of nursing and its numerous specialties, assistance with the prevention of role erosion and to assist nursing to establish itself as a professional entity (Cameron 1989, p. 210 and Hird 1995, p. 25). The list of competencies generated by this study will have many advantages for the individual practicing CNE.

These include most significantly defining the role of the CNE and delineating it from other educational and clinical nursing roles. The list of competencies generated may also serve as a framework for educational bodies conducting programs which educate and prepare nurses who wish to, or who are, functioning in this role. A clear and comprehensive role definition will also assist managers to recruit nurses into the role and to influence the skill mix of personnel employed (Andrews, 1993, p.13). It is also perceived that a comprehensive list of competencies will decrease role ambiguity and role strain for incumbents of this role.

Due to the lack of research into the role of the CNE, this study will be an introductory and descriptive research study. The study will set the scene for other research studies into the role of the CNE. It is anticipated by the author that this research study will enhance the CNE role, through not only creating a definition of the role, but also by triggering the nursing profession to discuss the role of the CNE and its relevance to nursing in the 1990's.

## ***1.2 Key Research Questions***

The major research questions examined in this study are:

1. What are the significant competencies required of an individual to fulfill the role of the CNE, as perceived by major stakeholders involved in the CNE role?
2. Would a sample group of stakeholders be able to agree upon a list of significant competencies for this role?
3. Will this list of competencies be agreed upon by a group of practicing clinical nurse educators?
4. Will the competencies offer an accurate reflection of the role of the CNE in NSW?

## ***1.4 Outline of the Research Study***

The thesis generated by this study consists of six chapters. Chapter one introduces the research study, outlines the research questions, and discusses the significance of the study and overviews the research process.

Chapter two reviews current literature on the role of the CNE and relevant topics. Literature to be examined in this chapter includes: roles and role theory; competencies and the issues regarding the formulation of competencies; the significance of the clinical area for nursing and nursing education; nursing as a practice based discipline and an analysis of clinical education within nursing. Literature sources reviewed are mainly from Australia, the United Kingdom (UK), and the United States of America (USA) with limited work from other countries. Due to the lack of specific research into the CNE role, items such as job advertisements and job descriptions for CNE roles and clinical educator's roles will be analysed and utilised for Delphi and questionnaire preparation. and discussed in this chapter.

In this research study only the Registered Nurse (RN) will be discussed. Enrolled Nurses (EN) or second level nurses education will not be discussed as ENs are ineligible at this present time to become clinical educators in NSW. The discussion surrounding the role of the CNE is based solely in NSW. Each state and territory in Australia maintains a state based nursing register and each state register has slight variations. The NSW nursing register has only two categories at the present time. Level one is for RNs and Certified Midwives, and level two is for ENs and mothercraft nurses.

Chapter three of the thesis will outline the methodology used in the research project and research design. This chapter will also give a comprehensive description of the complete research process that the researcher undertook. Chapter four will describe the data collected and the analysis of that data. Chapter five will examine the research findings and the conclusions reached. The last chapter, chapter six, will discuss the findings of the research project and their significance to nursing education. Recommendations for future research projects will also be made in this chapter.

The setting of this research study is the NSW Health System and the role as outlined by the NSW Nurses State Award (1993).

# CHAPTER TWO

## Literature Review

### ***2.0 Introduction***

In 1988, Howie (p. 23), an Australian nurse educator, stated that the clinical area was an important learning environment for nurses, and the clinical educator was seen by other nurses as a significant role model. Carpentino & Duespohl (cited in Wellard, Rolls & Ferguson 1995, p. 737) assert that clinical education is the core of all nursing education. Yet despite this acknowledged significance of the clinical area and the individuals who educate within this area, the literature on the specific role of the clinical nurse educator in NSW is non-existent. However, there is an abundance of literature on the role of the nurse educator, on the role of the Clinical Teacher (CT), a clinical education role in the UK, and on how to define roles. There is also a modest amount of literature on other clinical educators' roles such as the Clinical Facilitator (CF) in Australia and clinical educator's roles in the USA.

The aim of this chapter is to review all literature relevant to the role of the CNE. The literature review chapter is divided into the following sections:

1. What is nursing education?,
2. Nursing as a practice based discipline;
3. Why is clinical education so important?,
4. Clinical education in nursing - an international analysis;
5. Role theory;
6. Competencies;
7. Conclusion.

In the first section, literature relating to nursing education is examined. The history of nursing education is considered at length and the transfer of pre-registration nursing education to the tertiary sector in NSW and its impact is discussed fully. The second section examines nursing, and why nursing is considered a practice based discipline. The third section examines literature pertaining to the clinical area and its significance to nursing education. The issues surrounding education in the clinical area and its related problems are discussed at length in this section.

The fourth section examines the issue of who actually teaches in the clinical area and includes an examination of job advertisements and job descriptions of the CNE. Role theory and its relevance to the research study are explained in section five. Section six looks at competencies, for nursing and other professions. The competency debate and its relevance to role theory is discussed. Section seven is a conclusion to this chapter.

## **2.1 *What is Nursing Education?***

A history of nursing education is outlined in the following section to set the scene to describe the introduction and history of the CNE role. The forms of nursing education that exist today, both pre and post registration, is discussed at length to provide background information on the diverse settings within which a CNE would be expected to operate.

Nursing education has coexisted with nursing practice since the 1800's. Major changes have occurred both in the practice of nursing and in the education of nurses since this time. To define nursing education it is necessary to firstly define nursing. A precise interpretation of what nursing is has been examined from many angles by a multitude of nurse theorists and researchers. Gray and Pratt (1991, pp. 3-4) describe nursing as an art and a science that can also be defined as a 'vocation; a practice; an occupation; an industry; a craft or a profession.' Lawler (cited in Gray & Pratt {eds.} 1991, p. 212) states that 'nursing is fundamentally and centrally concerned with the care of other people's bodies'. While Russell (cited in Gray & Pratt {eds.} 1991, pp. 73-4) states that it is time to stop asking the question of what is nursing and to move on to areas such as 'what do we want nursing to be?'

Nursing Education however has a clear and concise definition. It is the education of nurses both pre registration and post registration in both the clinical area and in the classroom (Clifford 1989; Howie 1988; Crotty 1993a). In Australia, Registered Nurse (RN) education can be delineated into the two major stages of pre and post registration. Pre-registration education is aimed at educating an individual to fulfill the role of a RN in a health care setting. Post-registration education is aimed at educating the RN for a specific role within a specialist setting. This may include educating nurses to work in an Intensive Care Unit, in the community, in management or in education.

All pre-registration nursing education in NSW is now performed in the tertiary sector. However, post registration education continues to be carried out by both the service sector (acute care facilities and community-based facilities) and the tertiary sector (NSW Department of Health, 1995).

The first documented specialist teaching role in nursing was the Home Sister, who was appointed in 1872 in the UK (Crotty 1993b, p. 461). This role had no clinical function or relationship, and was solely based in the classroom. Hector (1973, p. 37) believes that the clinical area was not seen as an educational forum, rather it was regarded as a working environment, where student nurses were able to gain education as a by-product of the work they undertook.

In 1978, nearly one hundred years after the first specialist teaching role was created in the UK, a report commissioned by the NSW government into nursing education, the Sax Report, made the following observations regarding nursing education in NSW:

1. There was a priority of service needs over education needs;
2. There was varying degrees of lack of correlation between classroom and clinical teaching;
3. There was inadequate preparation for service tasks during the nursing training period;
4. There was a lack of appropriately qualified nurse educators, inadequate libraries and other education services (Davies, cited in Gray & Pratt {eds.} 1992, p. 158).

Following this inquiry and under intense lobbying by various nursing organisations, such as the College of Nursing Australia, the Australian Nursing Federation and the National Florence Nightingale Committee, pre registration nursing education was relocated to the tertiary sector in the 1980's (Russell 1988, pp. 40-41). Henderson (1997, pp. 1-2) asserts that this provided an opportunity to develop curricula determined by educational requirements rather than the service demands of the hospitals and community settings. It is also argued by French (1992, p. 620) that prior to nursing education being located in the tertiary sector, the education of nurses was not an educational experience but was rather service based training.

This period of rapid change in nursing education has not been problem free. Walker and Norby (1987, p. 88) believe that modern nursing has been plagued by a perceived dysfunction or misalignment between the nursing service, and the tertiary sector.

This perceived misalignment has been coined the education/practice gap, or the theory/practice gap (Davies cited in Gray & Pratt {eds.} 1991, p. 129). Davies (cited in Gray & Pratt {eds.} 1991, p. 129), states that this gap exists when students of nursing are unable to put classroom learning into clinical practice. Davies (cited in Gray & Pratt {eds.} 1991, p. 129), further states that this gap however is not new. It is alleged to have existed since the commencement of nursing education where the classroom was always distinct from the clinical setting. It is however still a major area of concern for nursing.

Education is now widely recognised as an integral part of nursing and health care generally (Higgins 1991, p. 11). Higgins (1991) contends that this education, whether directed toward educating individuals for the general role of RN, or for the specific roles within nursing, must be linked to the practice setting of nursing. Gray (1991, p. 191) states that nursing education is critical not only in the preparation of practitioners who are to enter the realm of professional practice, but also to ensure ongoing competence for the provision of a safe and high quality service to the community. Clifford (1989, p. 3) declares that the quality of nurse education, including both clinical and classroom education, is directly linked to quality of care offered to clients. The realm of nursing practice, she asserts, requires that education be not only tertiary based but also be directly linked to the clinical setting where nursing is practiced (Clifford 1989).

## ***2.2 Nursing as a Practice Based Discipline***

Nurses and other health practitioners regard nursing as a practice-based discipline. Garrett (cited in Gray and Pratt {eds.} 1991, p. 219), states that ‘nursing has now moved towards a clearer understanding of both the art and science of nursing embodied in the work of its practitioners.’ It is the work of these practitioners that is the basis of the discipline of nursing. This section on nursing as a practice based discipline sets the scene to describe the work of the CNE. The CNE educates in the clinical setting and assists nursing practitioners to understand and to perform the art of clinical nursing.

In 1960 Virginia Henderson (cited by Russell in Gray & Pratt {eds.} 1991, p. 76) stated that, ‘the unique function of the nurse is to assist the individual, sick or well in the performance of those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will, or knowledge, and to do this in such a way to help him gain independence as rapidly as possible.’

- Expert.

Benner proposed that a nurse moves along the continuum from novice to expert as a result of clinical expertise, clinical education and clinical experience. Benner hypothesised that it was the clinical area that was the most important factor in the nurse's evolution from novice to expert status. It is through practicing nursing that a nurse develops and acquires practical skills, which in turn allows him/her to be a superior nurse. Hence the clinical area is deemed central and vital to nursing (Benner 1984). It is this clinical knowledge along with academic theory and knowledge that enables practitioners to advance from novice nurses to expert nurses (Benner 1984).

Benner's theory of skill acquisition within nursing, and Henderson's theory of nursing, are grounded with the actual practice of nursing. Benner believes that nursing education in the practice setting assists the nurse to move with greater speed along the continuum from novice to expert. Henderson's theory talks only of the practice of nursing, of what nurses actually do when they nurse within the clinical area. Clinical education is therefore concurrent with educating practitioners on how to perform in the clinical setting, and consequently must be closely linked to the advancement of nursing.

### ***2.3 Why is Clinical Education So Important?***

Clinical education is deemed important by the nursing profession because nursing is considered by the profession to be not just a theory based discipline but also a practical based discipline. Nursing is performed in the clinical setting, and hence knowledge about how to perform in this setting is vital to the practice of nursing. The following section on clinical education outlines nursing authors' beliefs regarding the significance of the clinical setting and the dilemmas that the profession faces when confronted with teaching in this setting. The differences between classroom and clinical teaching are described both in the UK and the Australian setting. The differing skills required for these different types of teaching are discussed.

The need for nurse teachers in the clinical setting was not fully recognised by the nursing profession until the 1950's (Mapp 1982, p. 60). It took the nursing profession, a practice based profession, over one hundred years to recognise the significance of education in the clinical area and to accept that there was a major difference between classroom education and clinical education (Mapp 1982, p. 60).



Clinical education can be defined in many ways. Hoozer et al (cited in Morgan & Warbinek 1994, p. 160) state that clinical education can be defined as 'acting and interacting with student, clients and other health care professionals in settings where people are in need of health care, to promote both the maximum learning of students and the maximum health of clients.' The central theme of clinical education is that of the education of practitioners within the clinical setting. Carpentino and Duespohl (cited in Wellard, Rolls and Ferguson 1995, p. 737) assert that clinical education is the center or core of all nursing education. Clinical education can take place in any clinical setting. It can occur in an acute care hospital, in a community setting, in a client's home or in a clinic. Wherever nurses interact with clients then clinical education can, and will take place (Meleca, Schimpfhauser, Witteman and Sachs 1981, p. 33).

Billet (1992 cited in Hird 1994, p. 4) also believes that the workplace is an important setting of learning for all workers. The workplace, for clinical nurses can be defined as any clinical setting where nurses work. It is in the clinical setting that nurses learn what problems other clinical nurses consider worth solving, and how they practically solve these problems (Billett 1992 cited in Hird 1994, p. 4; Bendall 1975 cited in Owen 1993, p. 817). It is in the clinical setting that nurses get to observe other nurses performing the practice of nursing. Many experienced nurses recognise that the practice of nursing in clinical areas represents the core of nursing education, and hence are willing and appropriate assistants in this learning process (Department of Health and Social Security 1972, United Kingdom Central Council for Nursing Midwifery and Health Visiting 1982; Wyatt 1978 cited in Jones 1985, p. 349).

It is not only the skills of nursing, such as dressing techniques or assessment procedures that an individual nurse will learn in the clinical setting, it is also the clinical decision making skills that are learnt primarily in the clinical area. How to prioritise a client load, how to ensure that appropriate care from the different health care disciplines is administered to a client at the appropriate time, and many other decisions that RNs are required to make can only be learnt in the clinical area. Szekely (1981, p. 52) believes that the contrast between classroom learning and clinical learning can however pose a real dilemma for students of nursing.

It is in the classroom that nurses first learn about the practice of nursing such as caring for the hygiene needs or psycho-social needs of a client, but it is in the clinical setting that the nurse put these learned theories into action. This can be hazardous for both the nurse and the client. However with the right safeguards in practice it can also be extremely rewarding for both parties involved.

Hinchliff (1987) believes that these safeguards can include supervision by an experienced practitioner such as a clinical educator, assistance with new skills or tasks and a beginning prior knowledge of patient's conditions and treatments before going to the clinical area.

Karuhije (1986) views clinical education as being problematic, and hazardous at times but with many advantages and purposes. Karuhije (1986, p. 137) states that 'one major purpose of clinical education in nursing is to integrate science knowledge with performance competencies associated with the care of clients.' Meleca et al (1981, p. 33) asserts that clinical education also allows the nurse (student) to acquire the kinds of professional and personal skills, attitudes and behaviours thought essential for entering the nursing profession and the health care system. Clinical education may, however, not always fully support the learning process for a number of reasons. One of these reasons is the nature of the clinical setting which can be dynamic, unpredictable, and at times hostile to learning (Hinchliff 1987). To gain optimum learning in this dynamic setting and to ensure that clinical education is not hazardous to clients or nurses, clinical education must be supported by experienced educators and clinicians. Hinchliff (1987) asserts that being supported by clinicians in the clinical area is good for the novice's esteem and for the care of the client. However this support may not be educational and hence the instructive moment in the clinical area may be lost. Each clinical experience will be an educational experience if the learner has a willing teacher or educator who is able to separate themselves from the clinical area and has the ability to teach or explain the significance of clinical events.

Competent clinical teachers can assist nurses to integrate classroom theory with their clinical practice (Morgan & Warbinek 1994, p. 160). Morgan and Warbinek however state, that clinical teachers differ from classroom teachers as classroom education differs greatly from clinical education. Clinical teaching requires different skills. Skills that are not guaranteed by clinical competence, or by the ability to teach in the traditional didactic manner (Morgan 1991, p. 1238). Morgan (1991, p. 1239) states that a clinical teacher is charged with the responsibility for establishing education opportunities in the clinical setting that will facilitate learning. This learning must be done in conjunction with the work of the clinical setting (Morgan 1991).

The clients' needs should always be given a higher priority than the students' educational needs. The role of the educator in the clinical setting therefore has a direct effect on client care. The educator ensures that the client's care is not affected by the ability of the learner, or by the educational process.

Martin (1992) believes that if a novice nurse is left un-supervised, they may attempt care on a trial and error basis, which has the potential to be extremely dangerous for the client and detrimental to the learner.

In Australia, clinical teachers were not specifically employed till the late 1960s (Russell 1990, p. 67). Russell (1990, p. 67) states that at the time it became apparent to the nursing profession in general, that clinical education, which had been the responsibility of the ward sister, required improvement. Therefore the Clinical Instructors (CIs) role was introduced into Australia, and the Clinical Teachers (CTs) role was introduced into the UK (Russell 1990, p. 67; Bolger 1985, p. 41). Russell (1990, p. 67) states that the person occupying the role of CI or CT was to be specifically trained in teaching nursing to nurses in the clinical area. Nevertheless, the expected improvement in the quality of clinical teaching did not eventuate, as the majority of the CIs lacked qualifications in teaching and there were insufficient numbers employed and therefore too little time available to each student. These problems were experienced not only in Australia but also in the UK where clinical education was given a low priority by the nursing profession and by the health care sector generally (Bolger 1985; Mapp 1982).

## ***2.4 Clinical Education in Nursing - An International Analysis***

The following section provides an overview of the literature regarding clinical education. Literature is reviewed regarding which personnel have been responsible for teaching in the clinical area. The problems that occurred in the past are identified as well as documented problems that continue to occur in the present. The different requirements of the classroom teacher and the clinical teacher are summarised. The focus of clinical educators prior to the transfer of nursing education to the tertiary sector is contrasted with the present role of clinical educators. The CT role in the UK is described in detail as this role was phased out due to problems that are similar to the Australian experience. The restructuring of the CNE role and other clinical based roles in NSW are outlined, and the impact this has had on the nursing profession is discussed.

‘It is generally accepted in education and nursing that practical experience is a vital aspect of learning’ (Windsor 1987, p. 150). Nurses have always participated in clinical education since the inception of the discipline (Windsor 1987). However Russell (1990) and Craddock (1993) believe that clinical education has transpired on an ad hoc basis, occurring more by chance than by the implementation of a planned clinical learning program.

Whilst individuals employed into clinical teaching roles are mainly required to have undergraduate or post graduate certificates as minimum qualifications (Job advertisements, Sydney Morning Herald 1995-6). Karuhije 1986 (cited in Packer 1994, pp. 411-2), observed that teaching in the clinical area is not a role revered or sought after by members of nursing faculties. In fact, it is often viewed as a form of punishment. Karuhije (cited in Clifford 1989, p. 15) also observed, in nursing faculties that the more highly qualified the nurse, the less likely he/she is to be involved in clinical teaching. Smyth (1988) discusses at length, the marginality of the clinical teacher due to this perceived low status and lack of respect from both clinical and educational peers. Smyth describes how the clinical teacher is regarded as a non-clinical member of staff. They are often regarded as not a full member of the ward/unit area, but also, not as an educationalist and member of the education staff. This alienates the clinical teacher and results in a lack of ownership and responsibility for clinical education.

In the USA, the clinical aspect of the nurse teachers' role has also taken a low priority (Clifford 1989). In the UK, the role of the CT evolved in the 1960s (Bolger 1985). Bolger states that the main roles of the CT were to bridge the theory-practice gap of the student of nursing, and to assist students of nursing to integrate their classroom knowledge within the clinical setting. The CT was always a RN, usually a ward sister, who was experienced in nursing and in ward management, however was not often experienced in teaching or clinical teaching. The role of the CT was similar to the role of the CI in Australia (Smyth 1988, p. 625).

The CIs' and CTs' main focus was on the student of nursing in the 1960s, 1970s and 1980s when students of nursing were trained in the hospital/service sector, in both the UK and Australia (Bolger 1985 and Russell 1990). Bolger (1985, p. 41) believes however that CIs and CTs were most effective in helping the qualified nurse to become educationally aware, thus creating an appropriate learning environment within the clinical setting. In this role, as a facilitator of learning, the clinical teacher provided the most effective means of passing on skills and clinical knowledge.

The CT role in the UK was not a success, and was phased out in the 1980's in a plan to create one grade of nurse teacher who would teach in the classroom and in the clinical area (Clifford 1989, p. 5). There are many reasons why the role was not a success. Clifford (1992), Smyth (1988) and Bolger (1985) assert that the role was unsuccessful because both ward staff and educational staff assigned a low status to the role of clinical education in general; the lack of a career structure for the CT; and the lack of preparation for CTs.

One of the major factors that appeared to militate against CTs was the decision to not employ them in sufficient numbers to adequately perform the role that was required of them (Bolger 1985, p. 41). All of these factors assisted in the decision to suspend the role of the CT in the UK (Bolger 1985; Karuhije 1986; Craddock 1993; Smyth 1988).

The Australian experience is slightly different. CTs or CIs were also employed to assist students of nursing to bridge the theory practice gap in the 1960s and 1970s, but this role was phased out in the 1980s when pre registration education for nursing was transferred to the tertiary sector. However clinical teaching roles still exist today in Australia. There are two major clinical teaching roles in NSW, at this time. This is due to the fact that pre registration education is the domain of the tertiary sector, and clinical education of registered staff is the domain of the service sector. The roles are titled Clinical Facilitators (CFs) and Clinical Nurse Educators (CNEs). CFs are employed by the tertiary sector to educate students of nursing, while CNEs are employed by the service sector to educate registered and enrolled nurses in the clinical area.

In 1990 the New South Wales Nurses Association (NSWNA) reviewed nursing classifications within the award structure with an emphasis on the Nurse Educator (NE) classification. A Structural Efficiency document was presented to the Health Administration Corporation for discussion and consideration in June 1990. The document outlined six new classifications for nurse education (NSWNA, 1990).

These new classifications were developed with the intention to:

- deleting obsolete classifications;
- introducing new classification where considered relevant;
- rationalising and redefining a number of award classifications to appropriately reflect changes in the industry;
- and ensuring that equitable relationships between classifications were maintained;
- defining existing classifications with a view to introducing performance indicators relevant to the classification (NSWNA Annexure B 1990, p. 2) .

The previous review of the nurse educator classification had occurred in 1978. Since that time, education of nurses had changed dramatically (NSWNA 1990, p. 18 ). Pre registration education of RNs had moved from the service sector to the tertiary sector, hence nurse educators (NE) and CNEs in the 1990s carried out vastly different roles than they had in the 1970s (NSWNA 1990, pp. 17-8 ).

CFs are employed in NSW by the tertiary sector to provide clinical education to students of nursing (University of Technology NSW, 1997). A CF can be defined as a registered nurse who is employed by a tertiary institution to facilitate learning of students of nursing in the clinical area (Martin 1992). CF is a term used in NSW to describe this role, other terms may be used in different states of Australia and in different countries. This facilitator must have recent clinical experience and a knowledge of the pre registration curriculum and objectives (Sydney Morning Herald 1995-6). The facilitator needs to have a broad clinical experience base, as they are required to facilitate learning in a variety of clinical settings (Wellard, Rolls & Ferguson 1995, p. 738).

The CF role has been widely researched by nursing academics over the last few years. The research on the role and purpose of the CF derives not only from Australia, but also from the UK and the USA. Authors such as Hart and Rotem (1994), Crotty (1993a) and Clifford (1996) have all examined this role and its effectiveness. The role as stated previously may be known by other titles in different states of Australia. It appears that all faculties of nursing, which conduct pre registration programs, have a structured clinical education program with clinical educators connected to the program (Hart & Rotem 1994; Morgan 1991; Meleca et al 1981; Windsor 1987; Nehring 1990).

The CNE role appears to be unique to Australia as no similar roles are defined in the literature for the UK or European Countries. Del Bueno, et al, describes a role similar to the CNE at Massachusetts General Hospital in the USA (Del Bueno, Griffin, Burke and Foley 1990). However this role, titled clinical teacher, appeared to be restricted to this one hospital and not part of any state or national nursing award. Due to this uniqueness and lack of literature on the role of the CNE, job advertisements for the role of CNE and job descriptions have been examined. Different titles were used in job advertisements to describe the role of the CNE in NSW. This made the task of examining the role even more difficult.

However nine job descriptions and advertisements were collected over a period of six months and examined for content. Analysis of the job descriptions and advertisements is explained in detail in the methodology chapter, Chapter Three.

Essential requirements and components of the role were examined in light of the literature on the role of the CNE. Each job description was a variation of the NSW award, with many advertisements having requirements outside the award.

However common threads with the literature could be identified, and these threads, or themes, were used to assist with the creation of domains of practice, which are the basis of the methodology used in this study.

The role of the CNE has numerous problems and difficulties associated with it. One major problem is the lack of a workable definition of the role. This is despite the work of the NSW Department of Health and the NSWNA. The role of the individual CNE in health facilities can differ greatly from one facility to another. The CNE role can also be often confused with either a clinical or managerial nursing role. This is clearly articulated in the variety of job descriptions that were obtained.

The author believes that the problems that existed with the CT role in the UK are similarly occurring with the role of the CNE in NSW. One similarity is the low status allocated to CNEs, demonstrated by their alignment with the CNS Award, in NSW (NSW Department of Health 1995). A CNS is defined by the NSW Department of Health (1995, p. 10) as 'an appointed RN with specific post basic qualifications and 12 months experience working in the clinical area of his/her specified post-basic qualification or a minimum of four years post-basic registration experience including three years experience in the relevant specialist field.' Their role is to be a clinical specialist or a clinical resource person for staff on a specific clinical ward or unit. The ward/unit may have any number of CNSs, but the ward usually only has one CNE. As the CNE is usually employed on a Monday to Friday basis a CNEs remuneration is often less than their clinical counterparts due to the lack of shift allowances incurred. It has been suggested anecdotally by managers that recruitment into the position of CNE may be difficult due to this low remuneration, which is felt to be reflective of the overall low status of the role.

The career structure for the CNE is also non-existent, as was the case with the CT. Due to the alignment with the CNS award, the career pathway for the CNE is only clinical. However this is not always possible as the only clinical progression for the CNE, is that of a Clinical Nurse Consultant (CNC). A CNC is defined by the NSW Department of Health (1995, p. 11), as an 'RN who has at least 5 years post basic registration experience and who has in addition, an approved post basic nursing qualification relevant to the field in which they are appointed, or such other qualifications or experience deemed appropriate.' The CNE may educate across many different areas and specialties.

This alignment with a clinical role may also cause conflict for the CNE, as the role is mainly educational, but is not aligned with any educational career pathway as was proposed in the 1990 NSWNA Structural Efficiency Document (NSW Department of Health 1995).

Lack of preparation for an education role can also cause problems for the CNE. It is a widely held belief by nurses that the best clinician makes the best clinical teacher (Morgan 1991). Morgan (1991) and Meleca et al (1981) assert that this is not accurate, as clinical teaching requires a separate set of skills. These skills may not be automatically ensured by competence in one's area of clinical expertise. However, the CNE may not be required to have education qualifications but only to be recognised as a clinical expert (Sydney Morning Health Job Advertisements 1995-6). It is perceived that this lack of preparation can cause role anxiety and disharmony for the CNE, and for the staff who are to be educated by the CNE.

The other major factor that mitigated against CTs in the UK and the CIs in Australia in the past, was the decision not to employ them in sufficient numbers (Bolger 1985 & Russell 1990). This appears to also be a factor for CNEs in NSW as the numbers of CNEs employed differ greatly within individual health facilities (NSW Department of Health 1995). CNEs may be employed for individual wards or units, or they may be employed for a specific population such as new graduate RNs, or for TENS. CNEs may also be employed for a much larger population such as a hospital or an Area Health Service (Sydney Morning Herald Job Advertisements 1995-6). Russell (1990, p. 67) states that it is difficult for any role to be effective if a position or role does not have sufficient numbers of role holders to make a difference.

Wood (1987, p. 233) believes that over the last two decades clinical teaching has become more complex and difficult as technological advances increase, and factors such as decreasing lengths of stay impact on health care delivery. CNE numbers may not be sufficient now to facilitate adequate education of RNs due to the dynamic nature of health care.

The UK Department of Health (1987) in regard to clinical teachers stated, 'The future teacher must be able to demonstrate an advanced level of knowledge of the theory and practice of nursing. They must be qualified or clinically credible in the area of practice they teach and hold a teaching qualification.' Due to the similarities and problems with the role of the clinical teacher (educator) world wide, it is reasonable to translate this statement to the current situation in NSW. Therefore, the role of the CNE in NSW needs to be closely examined to elucidate the utility of this role to the practice of nursing.



## 2.5 *Role Theory*

This section examines the history of role theory and explains how using this theory can be used to define a role. The section also examines the problems that may occur if an individual occupies a role that is not clearly defined. Major work from one nursing researcher on roles is outlined. Role theory is used within this research study to examine the role of the CNE in NSW.

In 1969, Ruddock (cited in Hardy & Conway 1988) stated that the term role may be used in three separate ways. Ruddock believes the term role could be used to refer to the expectations of other people, to the way the individual thinks he/she is expected to behave, and/or to his/her actual behavior. Gerrish (1990, p. 199) asserts that a person's perception of their role may be vastly different from the expectations or perceptions of their co-workers or peers. Role expectations refer to what is expected of an individual occupying a particular role by the individual himself, other members of his/her workplace or by the wider public (Gerrish 1990, p. 199). Clifford (1996) believes that role expectations can be clearly set out in such items as job descriptions or performance criteria. These descriptions however, may be vague or very general, causing the stakeholders to place their own significance on certain items within the descriptions.

Managers who were requested to supply job descriptions for their CNEs stated that these job descriptions may also be written by the incumbent occupying the role, Therefore they may not reflect what is really required of the role by other stakeholders such as members of the ward or their manager. Choudhry (1992, p. 267) asserts that to ensure that a role is effective, the expectations for specific behaviors at a specific time and place by the role holder, should be recognisable to all who occupy the role.

Differences in perceptions and or expectations may particularly occur if the individual occupying a role is uncertain about where the role fits into the general scheme of the ward/unit, or is uncertain about the objectives or goals of the role (Hardy & Conway 1988). Furthermore Hardy and Conway (1988) state that without a clear definition of the role, the role is open to personal interpretation and misuse. The role may be interpreted differently by the role holder, the role holder's peers and/or the manager.

A role, can also be described as a 'linkage between individual behavior and social structure, where a set of norms or rules are applied to an individual who occupies a particular role or position' (Clifford 1996, p. 1136). Clifford (1996) contends that society expects an incumbent of a role, such as a policeman, to act in a certain way and not to act in a dishonest or corrupt way.

This is true for all roles. Each individual in a society occupies many different social roles such as wife, mother, sister and daughter, as well as professional or occupational roles such as nurse, manager, counselor or educator.

The study of a role may focus on an individual, or on a group of people who perform the same role (Biddle & Thomas 1966 cited in Clifford 1996, p. 1135). The origins of role theory can be traced back to the 1930s. There are three major schools of thought on role theory credited to Mead (1934), Linton (1936) and Moreno (1962) 'representing the sociological, psychological and anthropological traditions' (Biddle & Thomas 1966 cited in Clifford 1996, p. 1135).

Hardy and Conway (1978 cited in Clifford 1996, p. 1139) state that 'the major influences in the evolution of role, can be considered from a structural perspective, after Linton, and from a symbolic interaction perspective, after Mead.' From the structural perspective the CNE role emerged from historical precedents, and this role now exists in an organisation under the control of professional guidelines that impact on the role and the role holder (Clifford 1996, p. 1139). The historical precedents of the CNE role include the old style training of nursing by the service sector and the use of CIs to teach students of nursing in the clinical area. From the symbolic interactionist perspective, the role of the CNE begins with the role holder and all the factors that contribute towards the way in which this role holder develops the role (Clifford 1996, p. 1139).

The study of role and the search for a single theory of role, 'has been likened to the search for a nursing theory where similar difficulties in developing a single theory can be observed' (Hardy & Conway 1987 cited in Clifford 1996, p. 1136). There are many different theories about roles and the various stresses that occur with the lack of a definite role outline.

A role can be broken down into component parts. Clifford (1996, p. 1138) states that while the word role is used as a general term to describe a given position, it is acknowledged that any role can be described in components or parts. It is these different components that can, and do, cause problems such as role overload or role strain.

It is specialised activities or components of a role that make up a role, define the type of role it is, and the type of behaviors that are required to perform that role adequately (Biddle & Thomas 1996). Various terms have been used to describe areas of difficulty that may occur to an incumbent of a role who is experiencing problems. Biddle and Thomas (1966) described areas of difficulties that may arise within a role.

Table 2.0 outlines some of these areas of difficulty.

**Table 2.0**  
**Areas of difficulty within roles.**

No.	Areas of Difficulty
1	Role ambiguity
2	Role conflict
3	Role strain
4	Role overload
5	Role incompetence
6	Role incongruity

(Biddle and Thomas 1966 cited in Clifford 1996, p. 1138), modified table

This table has been modified to include only areas of difficulties pertaining to roles. The purpose of this table is to illustrate the numerous difficulties that can occur with roles.

Gerrish (1990) maintains that if the expectations and perceptions of both the incumbent occupying the role, and the significant stakeholders in the role do not match, then role ambiguity will occur. Role ambiguity is a lack of clarity concerning the role expectations and uncertainty about one's work performance and behavior (Gerrish 1990, p. 200). Role ambiguity can lead to work related stress and role conflict. Decreased work performance is a direct result of role ambiguity.

Role conflict can occur within one role or between two or more different roles. Hardy and Conway (1988, p. 104) described this conflict as intra-role conflict and inter-role conflict. Both types of conflict arise from the lack of a clear definition of a role. Clifford (1996, p. 1137) asserts that role strain may indicate that a person occupying a role is experiencing conflict in fulfilling the role to an expected standard. Role strain can become apparent, and the person occupying the role may decide to leave the role or to carry on completing the tasks that they perceive are important, and therefore not fulfilling all the requirements of the role.

Kirwood (1979), Martin (1989), Robertson (1987), and Wright (1984), (cited in Clifford 1992, p. 340) state that role conflict has always affected clinical teachers (educators) as they attempt to bridge the theory practice gap. It is difficult to prove that this conflict affects CNEs in NSW due to the lack of literature. Based on the examination of job advertisements and descriptions for CNE position role conflict appears to occur.

Literature on nursing roles has been reviewed by the author. Other nursing researchers have examined nursing roles, such as the role of the NUM and the CNS. Both these roles were introduced in the late 1980s in NSW, shortly before the introduction of the CNE role (NSW Department of Health 1995). Duffield, Pelletier, Adams and Donoghue (1993 a&b) conducted extensive research on the role of the NUM in NSW and the role of the CNS in NSW in the late 1980s. Duffield (1993a) *et al* examined the role of the 1st line manager, and endeavoured, through the identification of skills/competencies required by individual managers, to define the role. The research was carried out in three major stages: firstly a literature review; secondly the use of the Delphi technique; and thirdly a survey of NUMs in NSW. Duffield *et al* (1993 a&b), identified 168 competencies from the literature on 1st line managers in the first stage. In the second stage using the Delphi Technique, these 168 competencies were given to a 16 member expert panel for consideration, and for ranking of the top 20 most important skills for a 1st line manager. The third stage of the research was a survey of 412 first line managers.

A total of 69 competencies were identified by both the panel and the managers as being extremely necessary to the role of a NUM. This methodology appeared to work well in identifying and delineating the role of the NUM (Duffield *et al* 1993 a&b). The use of an expert panel and a survey of practicing managers permitted a comprehensive analysis of the requirements of the role. Linstone and Turoff (1975, p. 10) believe that this methodology is well suited to identifying a role, where there is little or no literature on the role in question.

Duffield *et al* (1993) then conducted a survey of 373 CNSs in 1994 to determine the competencies that they believed were necessary to fulfill the role of CNS. The results of this study demonstrated there was significant overlap between perceptions of the skills needed to be a CNS and the perceptions of skills needed to be a NUM. Duffield *et al* (1993, p. 21), state that clarification of the roles is required to ensure that each role is fulfilled optimally and that there is no role strain or role overlap occurring. They assert that other nursing roles may experience role strain and overlap due to a lack of clear role definitions.

Duffield (1989a, p. 16) states that 'a role can be delineated and defined by identifying skills or competencies which are expected of people within that role.' By defining what competencies are required of people who act in the role, then the actual role can be more clearly defined. The expectations of the competencies should be gathered from a wide variety of experts such as managers of the role, educators of the role, professional bodies, industrial bodies and the actual CNEs who act in the role. Choudhry (1992, p. 267) believes that clarity of expectations is essential for reducing role ambiguity and for a person to be able to perform effectively in that role.

This methodology is appropriate for use in this study, to define the role of the CNE in NSW, by firstly identifying the competencies required to perform the role effectively.

## **2.6 Competencies**

The following section examines competencies both from a nursing and a non-nursing perspective. Competencies have been used as the main tool in the study of CNEs and therefore an in depth analysis of the competencies movement is provided below. Through defining the competencies required of an individual within a role, a role can be defined and delineated from other roles.

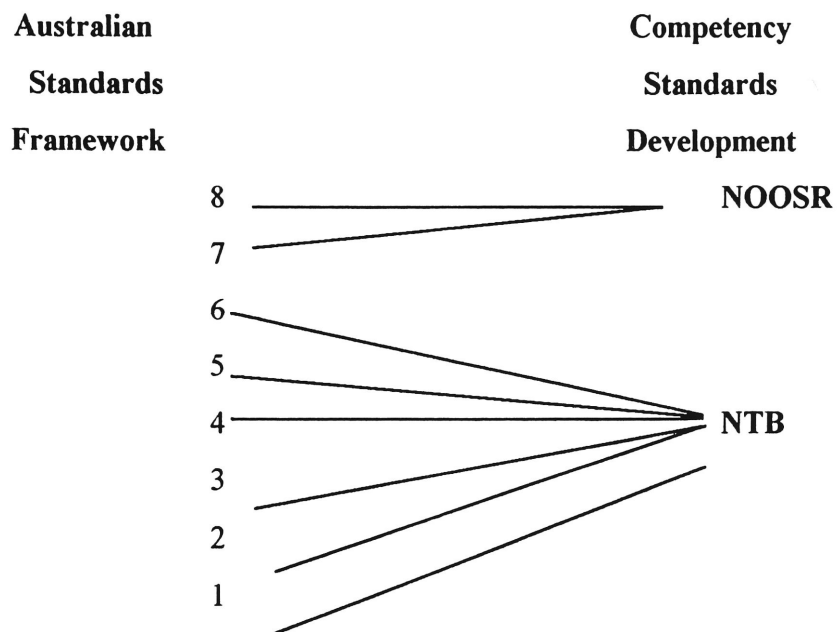
Competence is defined by Heywood, Gonczi and Hager (1992) as 'a construct referring to all the personal characteristics that together enable competent performance.' These personal characteristics are knowledge, technical skill and humanistic values or attributes. Together these attributes produce a performance, which is demonstrated by a practitioner at a set level (Cameron cited in Gray & Pratt 1991 {eds.} p. 209). Benner (1984, p. 40) asserts that competence requires an 'individual to deliberately and consciously plan and set priorities which result in effective and efficient behavior in routine situations.' Nursing competence has been defined by the Australian Nurse Registering Authorities Conference (ANRAC) (cited in Andrews 1993, p. 13) as the 'the ability of a person to fulfill the nursing role effectively and/or expertly.'

Competencies, which are the components or statements of competence, can be described as effective role behaviors (Clifford 1996). Competencies give an overview of the behavioral repertoire found in a competent or expert practitioner. Choudhry (1992) and Benner (1984) suggest that competencies refer to the real world of practice, instead of a proposed or theoretical world. A competency standard focuses on the capacity of an individual to perform in the actual workplace in various situations (Heywood, Gonczi & Hager, 1992).

The competency agenda gained momentum in Australia, in April 1989 after a special ministerial conference on training agreed to the development and implementation of a competency based training system (Parkes 1991, p. 12). The theme behind the push for a competency based training agenda was the 'Clever Australia' argument created by the then Labor Federal Government. The 'Clever Australia' argument was based on the recognition of skills and abilities to do a job, and had, as it's main focus, recognition of prior skills and learning. The National Office of Overseas Skills Recognition (NOOSR) was a major player in this development. The belief was that if skills and attributes could be identified for a position, then this allowed individuals the flexibility to apply for a position regardless of their background (Australian Nurse Teacher Society 1994, p. 1).

Gonczi, Hager & Oliver (1990) state that over 19 professions in Australia, including nursing have now moved towards implementation of competency standards. There is a general move nationally for all professions to implement competency-based training and education. This move towards identification of competencies and competency-based standards has not only impacted in Australia but also in the majority of English speaking countries (Gonczi 1994, p. 1). Three different organisations have sponsored work in the competency arenas. They are the National Training Board (NTB), the State Industry Training Advisory Board (ITAB) and NOOSR. The NTB and ITAB have guided and supported the work on competencies for occupations and vocations (Level 1 to 6 of the Australian Standards Framework - ASF). Whereas, NOOSR has supported the development of competencies for professions (Level 7 to 8 of the ASF) (Andrews 1993, p. 13). The discipline of nursing is regarded as both a profession and a vocation by these bodies. RNs are regarded as professionals by NOOSR, and hence fall into the category of level 7-8, the professional category, while second level nurses, ENs are regarded as being part of a vocational training and are situated on Level 5, and therefore come under the auspices of the NTB. Figure 2:1 displays the different levels within the ASF. The levels that are under the auspices of NOOSR and the NTB are clearly demonstrated.

**Figure 2:0**  
**Areas of Responsibility in Standards Development**



Source: Andrews (1993). Specialisation and competency standards, issues and developments.  
*Australian Critical Care*, 6,1, p. 13-15.

### Key To Standards

<b>Level 1</b>		Vocational Level	NTB
<b>Level 2</b>	Personal Care Assistants	Vocational Level	NTB
<b>Level 3</b>		Vocational Level	NTB
<b>Level 4</b>		Vocational Level	NTB
<b>Level 5</b>	Enrolled Nurse	Vocational Level	NTB
<b>Level 6</b>		Vocational Level	NTB
<b>Level 7</b>	Registered Nurse	Professional Level	NOOSR
<b>Level 8</b>		Professional Level	NOOSR

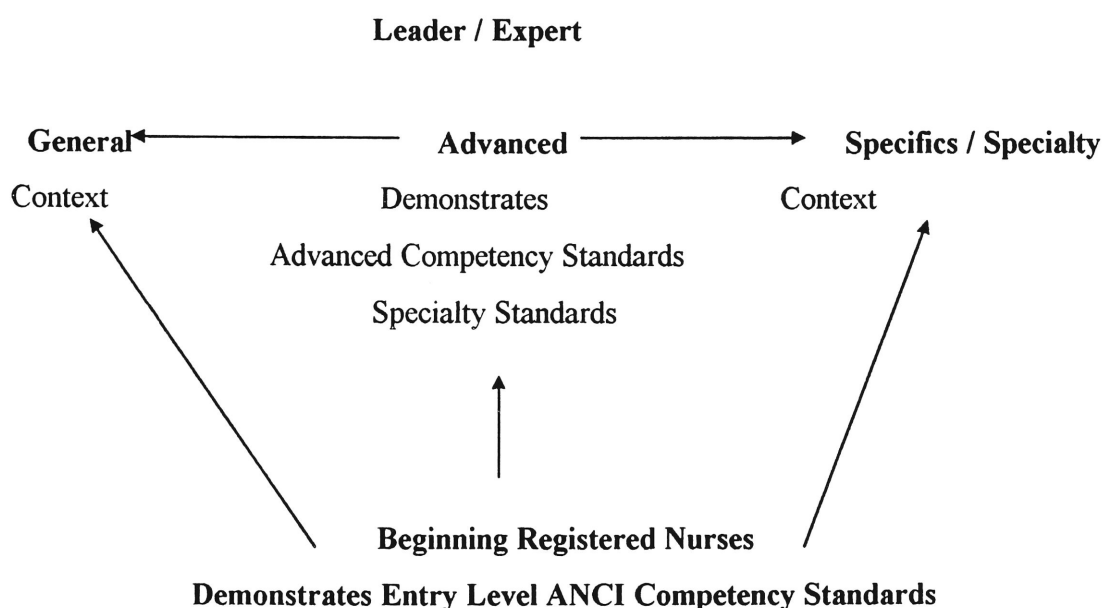
The nursing profession commenced work on defining competencies for beginning level practitioners in 1986 (Australian Nursing Council Inc. – ANCI, 1996, p. 8). The ANCI is a national body that consists of representatives from all nurse-registering bodies in Australia. The ANCI mandate is to provide consistent standards of nursing registration nationally. This initiative was precipitated by the need to develop consistent standards for the assessment of overseas nurses who were seeking registration in Australia (ANCI 1996, p. 8).

The above mentioned specialty bodies developed their competency statements through individual research by their professional bodies and used a variety of different methodologies. The CACCN used participant observation as the main methodology whilst ANTS utilised expert opinion as their primary methodology.

The ANF and the NNO advanced practice competencies are relevant to all nurses as they form the basis of a set of generic competency statements for all RNs in advanced practice (ANCI 1996, p. 6). The ANF and NNO study consists of a series of national workshops and a call for written submissions, with story analysis as the major research methodology (ANCI 1996, p. 6). The framework used by the NNO and ANF is outlined by Andrews (1996) and is represented in diagrammatic form in figure 2.2.

**Figure 2:1**

**National Nurses Organisation and ANF Framework for Advanced Practice**



Source: Andrews (1996). State of play or where are we at and where to now.

*Nursing Matters*, 9, p. 10.

This descriptive framework demonstrates how the research project is attempting to build upon the revised beginning level competency and standards (ANCI) and to describe how advanced practice occurs for nurses (Andrews 1996, p. 10). This research study is ongoing.



A National Body for all Nurse Teachers (ANTS) was formed in 1972 to give nurse teachers a united voice and to promote professionalism among nurse teachers. A component of the ANTS mandate was to develop a set of competencies for all nurse teachers. A steering committee of 20 members representing different facets of nurse education was used to develop the competencies through consensus. There were, however, no clinical educators, involved in this process. The initial group conducted a literature review and various workshops were held in NSW.

Workshops were only carried out in NSW, because at the time of the study, ANTS was only a State based organisation. The group developed a series of competencies in state based workshops. The competencies are now in the process of being validated in the workplace as part of a separate research project. It appears however, that problems could exist in relation to this project including: firstly the lack of CNE and CF involvement in the initial stage of the project; the issue that the broad competencies generated by the group are for very different professionals ranging from Professors of Nursing to CNEs; and that the competencies have not been validated in the workplace.

The lack of involvement of CNEs and CFs may be due to the definition of a nurse teacher held by ANTS. ANTS define a nurse teacher as 'an experienced RN who holds, or is undertaking a recognised teacher education credential, and who integrates research based nursing, management skills, educational knowledge and expertise to achieve learning outcomes that meet the needs of learners and other stakeholders in the educational enterprise.' Job descriptions, advertisements and verbal anecdotal evidence from CNEs suggest that many employed CNEs do not hold tertiary education credentials and may not necessarily be working to gain them.

The advantages of defining and utilising competencies for a profession or an occupation are many. Parkes (1991, p. 12) asserts that competency based training and assessment emphasises what an individual can actually do as a result of their education and training, rather than what it is assumed they can do. Hird (1995, p. 25) contends that a set of competencies for a profession can define not only the basis of that profession for those within it, but also for those outside the profession. Furthermore Hird (1995, p. 25) considers that this will help individuals to understand the competencies required for practice within a certain profession.

Cameron (1989) believes that the role of a nurse and nursing in general is constantly under review and under siege from other professions and occupations.

Competencies can be validated by members of the profession reviewing draft competency statements and assessing the relevance of them to their work practice. Alternatively acknowledged experts of the profession may review the competencies, then let them be trialed by members of the profession using them to assess other members of the profession (Andrews 1993 & CACCN Inc., 1994). Parkes (1992 a&b), Andrews (1993) and Cameron (1989) believe that the generation of validated competencies will define the role of a profession and the role of a specialty within a profession.

In the past nurses often focused on skills or tasks. These could be directly observed, and then assessed or graded easily. However, these observable skills often did not take into account the complexity of the nurse's role, or the range of abilities that are required to perform that role (Gibson & Lawson, 1994). The nursing profession now clearly identifies that nurses do not just perform skills, but carry out complex and significant roles. The CNE, as part of the nursing profession, must be judged in the same manner as other nurses. Gibson and Lawson (1994) assert that a set of clinical competencies or competency standards allow for the recognition of the complex nature of the professional CNE role, and the context within which the role functions.

## **2.7 Conclusion**

The literature reviewed in this chapter was drawn from the UK, USA, Europe and Australia. Due to the lack of literature on the specific role of the CNE, job advertisements and descriptions were also collected and reviewed. A more detailed examination of these items is provided in the methodology chapter. Literature regarding nursing education and its history has been reviewed. The main reason for examining nursing education, as a topic, was to place clinical education within the broader context of nursing education. Clinical education, and who teaches in the clinical area, has also been examined in depth. The significance of the clinical area to nursing education was overwhelmingly defended by a number of nursing authors. The different educators who have taught and now teach in the clinical areas were discussed at length. The history of the role of the CNE in NSW has also been discussed.

Literature on role theory and competency development has been discussed at length. Role theory forms the theoretical basis for the study as it is perceived that without a clear definition of a role the incumbents of that role will be unable to fulfill the role to their full potential. Competencies are to be one of the major tools used in this study to assist with developing a role statement for CNEs in NSW.

The competency movement and debate is exceptionally topical for the nursing profession at the present time as specialties within nursing move toward developing their own competencies. The last section in the literature review examined the creation of domains of practice from the literature and from job advertisements and descriptions. The domains of practice are to form the basis for the Delphi rounds that will be the 1st line methodology used in the study. It is perceived that the domains may change as the research participants give their opinions on the role of the CNE, but for the 1st round, the domains created from the literature will be used. Characteristics under each domain were ascertained from the literature but will only be used for cross analysis with the research participants' answers.

# **CHAPTER THREE**

## **Methodology & Ethical Considerations**

### **3.0 Introduction**

This study was designed as a descriptive study to investigate the perceived role of the CNE in NSW. The aim of the study was to generate and validate competencies for the role of the CNE in NSW. In the following chapter, the various methodological techniques used to explore this role will be explained. Ethical considerations that arose out of researching the role of the CNE will also be explained. The methodology and ethical considerations chapter is divided into the following sections:

1. Research Design;
2. The Research Study, Stage 1 Review;
  - Job advertisements
  - Job descriptions
3. The Delphi Technique;
  - The panel members as experts
4. Creation of Domains of Practice
5. Stage 2 Questionnaire Design.
  - Pre requisite data
6. Ethical considerations
7. Target Population
8. Sampling and sampling criteria
9. Bias/Control
10. Validity
11. Reliability
12. Pilot Studies
13. Statistical Tests Used
14. Conclusion

The first section on research design section is divided into three components: is a comprehensive description of descriptive research; an account of content analysis; and a brief review of coding. Section two describes the first stage in the research study and has two components: a review of job advertisements; and a review of job descriptions collected for the research project.

Section three commences with an introduction to the Delphi Technique. This technique was used as the main methodology in the first part of the research study. The section is divided into areas describing the advantages of the Delphi technique, the limitations of the Delphi technique and why the members of the Delphi panel are the deemed experts. The creation of domains of practice for use in the CNE research project are described in section four. Section five outlines the questionnaire design of the Delphi rounds and the survey. An explanation of the Likert Scale that was used in the second round of the Delphi technique is also given in this section.

Section six outlines the various ethical considerations that have been taken into consideration when planning this research project. Section seven outlines the target population of this research project. In section eight, sampling strategies and the type of sampling strategy used in the research study are discussed. Section nine is on bias and control, and examines biases that may occur in this research study and how controls were set for them. Section ten and eleven are an in depth discussion on the issues of validity and reliability. Section twelve outlines the pilot studies used within the research project and section thirteen describes the statistical tests used to analyse the research data. Section fourteen is a conclusion to this chapter.

### ***3.1 Research Design***

Research design is the strategy or plan that is created specifically to answer a research question (Dulock 1993, p. 154). The purpose of a research design is to provide the scheme for answering specific research questions, gain control over the research process and hence improve the validity and reliability of the study (Burns & Grove 1993, p. 292; LoBiondo-Wood & Haber 1994, p. 194). Dulock (1993, p. 155) states that when choosing a research design, the researcher is influenced by many variables.

The amount of previous research and knowledge available in the field being researched is a major influence when choosing a research design (Dulock 1993, p. 155). The researcher knowledge of research design and methods will also have a major influence when choosing the main research design for a project (Dulock 1993, p. 155).

#### **CNE Research Project**

The major question to be assumed by the research was ‘ was it possible to define the role of the CNE through the creation of specific competencies?’

Variables that needed to be taken into consideration were many and included, the notion that managers and known experts within the field of clinical education were able to define what they perceived were necessary components of a clinical educators role. Other variables included that senior nursing staff were aware of the competency debate and were familiar with competency language. The researcher also perceived that the role of the CNE was similar in different health institutes and hence CNEs could use a general list of competencies. A major variable was the lack of literature and research surrounding the role. These variable led the researcher to choose a descriptive research methodology using known experts within the field of clinical education and the CNEs themselves to describe the role.

There has not been any research into the role of the CNE in NSW at this present time. This fact led the researcher to choose a descriptive and exploratory study to gain basic knowledge about the role.

### ***3.1.1 Descriptive Research***

LoBiondo-Wood and Haber (1994, p. 233), state that a descriptive research design may be used when researching opinions, attitudes or facts. They state that this type of design is often used as a basis for further research projects in the area. Skodol Wilson (1989) states that descriptive research designs are well suited to projects that are collecting demographic information, social characteristics, behavior patterns and information biases. A definition of descriptive research identified by Dulock (1993 p. 154) includes the following components:

1. To describe the facts and attributes of a given population or area of interest;
2. To provide a description or account of the attributes of an individual, or group;
3. To describe the characteristics of persons, situations or groups and how often certain phenomena occur;
4. To discover relationships between selected variables;
5. To answer questions based on what is occurring at the present time.

Descriptive research studies use various data collection tools such as questionnaires, interviews, observational methods, rating scales, checklists and instruments for measuring physiological variables (Dulock 1993, p. 155). Data analysis of descriptive research studies is based on the type of data collection tool used.

Descriptive statistics techniques have three main purposes:

1. To describe variables, using mean, medium, mode, range and standard deviation;

2. To describe the relationships between variables, using correlations and
3. To describe distributions, using frequency or percentage distributions generally depicted in graphs or charts (Dulock 1993, p. 156).

The advantages of descriptive research are numerous and are primarily related to the flexibility of the design and relevance to many research questions. The main limitation of descriptive research design is the lack of generality of the data generated. This is mainly due to not ensuring that the right data is collected from the right subjects in the right settings (Dulock 1993, p. 155). The other major limitation of the descriptive research design is the potential for multiple interpretations of the data (Dulock 1993, p. 155). This can only be controlled by a well-designed study with validity and reliability outlined in all reports on the research.

### **CNE Research Project**

The main aim of the CNE research project was to collect information regarding what characteristics and behaviors were required by CNEs within NSW. The principal data collection tool for the CNE research study was questionnaires. Data analysis includes describing the mean, medium, mode, range and standard deviation of each competency statement, as well as describing distributions of the data collected.

As this project is concerned with examining a specific role in a specific place, the data is not intended to be used to generalise clinical educator's roles in different states. However, the data generated from this projects may be used as a basis for future research project examining other clinical educators roles. The many controls that have been used to ensure that an expert panel is selected as well as the selection of a range of CNEs from different workplaces will ensure that the right subjects are selected for the research project. Validity and reliability are extensively reviewed throughout the research project and the thesis.

#### ***3.1.2 Content Analysis***

Content analysis allows the researcher to describe what ideas or themes appear in written reports or materials, verbal or behavioral data. The process requires the researcher to be analytical as well as creative (Skodol Wilson 1989, p. 469). The analysis was designed to classify large amounts of written words into categories based on the word relevance or significance (Burns & Grove 1993, p. 597).

Content analysis can measure many variables such as attitudes, motives, expectations, values, personality traits and perceptions (Polit & Hungler 1995, p. 348). However content analysis's limited by the risk of subjectivity and the large amount of work it takes to perform (Polit & Hungler 1995, p. 348).

The validity of content analysis depends on many variables. Skodol Wilson (1989, p. 475) states that the list of variables include:

1. Homogeneity. All categories are variations of the same thing. All categories are at a similar level;
2. Inclusiveness. All categories include every possible aspect of the variable without large categories such as mixed or miscellaneous;
3. Usefulness. Each category serves a purpose and relates to the research question;
4. Mutual exclusiveness. Categories are separate and independent;
4. Clarity and specificity. Categories are stated in clear, concise terms that other researchers and non-researchers can understand.

### **CNE Research Project**

The data collected in the first phase of this project will be written ideas and competency statements. It is anticipated that a large volume of written material will be collected from the first round of the Delphi. Content analysis will be used to break this data down into manageable components and for recurrent themes to be recognised and used in the second round of the Delphi. Attitudes, as well as facts, are to be collected in the first round of the Delphi.

It is acknowledged that subjectively may play a part in the analysis of the first round of the Delphi, hence categories formed will be cross-checked with relevant literature and job descriptions. It is also acknowledged that a large volume of work will be required to analyse the written data and a suitable time frame is to be established.

The amount of categories will be kept to a minimum to ensure that there is not a large list of competencies that share common components.

### **3.1.3 Coding**

Coding is a means of categorising and analysing written data. Coding is a part of content analysis, and hence themes within the data are recognised and codes are then assigned to the themes decided upon by the researcher. Once initial coding takes place, re-coding may occur.



Miles and Huberman (1994, p. 64) state that coding usually starts at the beginning of data collection and is a continual process. Re-coding usually results in fewer codes and tighter codes being used (Miles & Huberman (1994). The detail of coding required is determined by the research study and research questions asked (Miles & Huberman 1994, p. 64).

Coding allows the researcher to determine themes from written text. All codes should be consistent with the philosophical basis of the study and be easily recognisable to the researcher (Burns & Grove 1993, p. 569).

### **CNE Research Project**

Coding will occur after the first round of the Delphi and continue throughout the project. Codes will mainly be described in competency language to allow the formation of competencies to occur.

### ***3.2 The Research Study, Stage 1 - Review***

CNEs are employed in varying numbers in health care facilities throughout NSW, spanning the acute care setting and the community setting (NSW Department of Health 1995). CNEs can be employed for specific wards such as the intensive care unit or a general surgical ward; for a specific group of nurses such as TENs or new graduate registered nurses; or for a series of wards such as the medical division of a hospital (NSW Department of Health 1995). (The word ward will be used to describe a ward or a unit within a health care facility in this thesis).

In any one facility, CNEs can be expected to be responsible for the education of nursing staff in two to five wards; carry out education on a hospital or area wide scale; conduct nursing research; and assist with the management of a ward or a series of wards. While colleagues, in another facility, may have, as their level of responsibility, that specified by the NSW Department of health definition, namely the clinical education of nurses on one ward (SMH Job Advertisements 1996).

It is acknowledged that this is anecdotal evidence gathered from job advertisements , job descriptions and from speaking to CNEs. Scientific proof is required to demonstrate that CNEs do not have a common and comprehensive role definition that is used by a majority of health care facilities in NSW, and that this lack of a comprehensive and clear role definition leads to CNEs carrying out a variety of roles that far exceed the industrial or professional award for CNEs.

### **3.2.1 Job Advertisements**

To begin the process of collecting and researching the issue of the lack of a single credible definition of the role of a CNE, a review of job advertisements was undertaken.

Job advertisements for CNEs or clinical educators in the health section of the classified job advertisements in the Sydney Morning Herald (SMH), were collated and analysed for a six month period. The SMH is the standard location for advertisements for all nursing positions in NSW. There were a limited number of advertisements for CNE positions in the six month period, however advertisements did occur under various other titles such as Clinical Resource Nurse and Clinical Care Coordinator. Job advertisements examined, included all CNEs and other nursing positions where clinical education of nurses was the main focus of the role. It was anticipated that only a small number of job advertisements would be collected due to the relatively small number of CNEs employed in NSW. Clinical educators make up only a tiny percentage of the total nursing workforce.

Eight job advertisements were examined in total over the six month period. Each job advertisement consisted of a brief description of the job or place of work, essential criteria, desirable criteria and a reference for inquiries (Appendix 1, Job advertisements SMH).

Each job advertisement was analysed and common themes were identified. CNEs positions were advertised to work on wards as well as for specific populations such as TEN's or new graduate RNs. One advertisement was for a Clinical Educator/Research Coordinator for a general hospital, with the brief to cover all nursing clinical education within the hospital as well as to coordinate all nursing research activities. A rather diverse and broad role (Appendix 1).

Essential criteria from all eight job advertisements included:

- clinical experience, usually over three to five years;
- possession of a post basic specialty course, even for those generic positions when the CNE would be required to work across a broad range of specialties;
- experience in clinical teaching;
- communication skills;
- current registration;
- in approximately 50% of the advertisements, relevant tertiary qualifications or working towards relevant qualifications (Appendix 1). The qualifications most mentioned were education or adult education qualifications.

Desirable criteria included:

- experience in adult education;
- classroom teaching experience;
- tertiary qualifications;
- research experience;
- management experience (Appendix 1).

The person for inquiries was a NUM, nursing personnel manager, senior nurse educator, or in one case the Director of Nursing (Appendix 1).

### ***3.2.2 Job Descriptions***

After the job advertisements were collated, coded and examined, job descriptions were then obtained from the advertisements. The job descriptions were written in a variety of ways. They included, descriptions that used performance indicators as the basis, area of responsibilities as the basis or a simple task or skill list description. The job descriptions were collated and coded for themes and general information (Appendix 2, Job Descriptions 1996).

The majority of the job descriptions were divided into the following headings. Educational, Clinical, Professional and Administrative responsibilities (Appendix 2). The most common requirement to all the job descriptions was the responsibility of orientating new staff to the ward/unit (Appendix 2). Other responsibilities were unique to one or more job descriptions, a brief review of the other responsibilities is discussed under each of the above mentioned headings (Appendix 2).

As outlined in the job descriptions (Appendix 2) the educational responsibilities included:

- the development and conduct of orientation programs;
- the development and conduct of an ongoing education program for all nursing staff in areas of responsibility;
- the teaching of clinical skills where necessary;
- the assessment of staff members abilities;
- review of literature and audiovisual material for educational uses.

As outlined in the job descriptions (Appendix 2) the clinical responsibilities included:

- assuming care and responsibility for patients during orientation periods and when required by the ward;
- acting as a clinical resource when needed;
- acting as a preceptor in the clinical area as required.

As outlined in the job descriptions (Appendix 2) the professional responsibilities included:

- promoting a professional image when interacting with other health professionals, patients, relatives and the general public;
- actively pursuing and maintaining self education and professional development;
- demonstrating leadership and role model skills;
- advising staff of career pathways and opportunities;
- encouraging others to develop professionally.

The administrative responsibilities included:

- maintaining productivity and accountability within the area of responsibility;
- helping to prepare updates of patient information booklets;
- developing and participating in strategies for the maintenance of morale of staff in the ward;
- updating ward manuals;
- maintaining adequate records.

Research was also an area that was mentioned frequently in the job descriptions. However it was not mentioned in depth and was frequently given the generic title of ‘conducts research.’

### ***3.3 The Delphi Technique***

The Delphi technique is a quantitative method of research which aims to structure group opinion and discussion, without the group ever having to meet face to face, or being aware of the other panel members identification (Goodman 1987, p. 729). The technique takes its name from the Greek God, Apollo Pythios who, as master of Delphi was renowned for his ability to predict the future. It was first used formally in the USA in the 1950s by the defence department to forecast defence strategies, but is now used by a variety of disciplines including nursing (Goodman 1987, p. 729).

The Delphi Technique is a group orientated research methodology that aims to obtain the most reliable consensus of opinion of a group of experts (Linstone & Turoff 1975, p. 10). Goodman

(1987, p. 729) identified four features that distinguish the Delphi Technique from other group decision making processes. They are:

- Anonymity - members of the Delphi panel never meet, and do not need to be aware of who else is a member of the panel;
- Iteration and controlled feedback - the researcher controls the amount and type of feedback that is given to the panel members at the end of each round;
- Statistical group response - statistical analysis is carried out on data collected from the members of the panel. Analysis is assisted through the use of such tools as a Likert scale;
- Expert input - members of the panel are the deemed experts in the area that is being researched.

Duffield (1989a, p. 17) identifies four distinct phases to the Delphi Technique once a panel of experts is selected and recruited to the research project, and an adequate pilot study is undertaken:

1. Investigation of the subject under discussion, where each individual contributes information he/she feels is pertinent to the issue;
2. Trying to reach an understanding on how the participants view the issues. For example whether the members of the panel agree or disagree, and what they mean by terms such as important, desirable or significant;
3. Significant disagreements are looked at in the third phase to bring out the underlying reasons for the differences and possibly to resolve and evaluate them;
4. The final phase occurs when all previously gathered information has been initially analysed and the data has been fed back to the participants for consideration.

The Delphi Technique has a flexibility that allows a large degree of diversity in its application. It can be used to forecast events or phenomena, or it may be used for solving problems or for planning (Williams & Webb 1994 pp. 181-182). The Delphi Technique is now an acceptable methodology that is used widely, especially in nursing, where it has been used to: direct curriculum development; survey problems experienced by a select group; evaluate nursing competence; evaluate recent clinical experience; and to assist with the definition of specific roles (Williams & Webb 1994, p. 181; Duffield 1993, p. 227).

The Delphi Technique can also be used when accurate information is unavailable to the researcher, or expensive to obtain (Linstone & Turoff 1975, p. 10, and William & Webb 1994). A good example of this is in the health care field or when no research has been undertaken on a

specific point of concern (Linstone & Turoff 1975, p. 10). The Delphi Technique allows an exploratory approach to be taken to the un-researched or unknown subject topic (William & Webb 1994, p. 187).

### *Advantages of the Delphi Technique*

The Delphi Technique has a flexibility which allows considerable diversity in its application and it has several advantages, many of which are related to the fact that it provides consensus of expert opinion without the biases which can readily occur in comparable techniques such as brainstorming, focus groups and group discussions. Duld, Giffin & Patton (1984, p. 151) state that normal group processes such as brainstorming and large group discussion go through four distinct phases.

These are:

1. Forming;
2. Storming;
3. Norming;
4. Performing.

Forming is usually the initial forming or introduction of the group. All members get to know each other and tend to sort out the roles which each member of the group will take on (Duldt *et al* 1984, p. 151). Storming is when the group experiences conflict. Decision-making, rules and limit setting are usual points of conflict. The identification and ownership of roles can also cause considerable conflict for the group (Duldt *et al* 1984, p. 151). Norming is when the group becomes cohesive and starts to work together as a team (Duldt *et al* 1984, p. 151) and, performing is when the group is really achieving what it set out to do. All members of the group are committed to the task at hand and are group and task oriented (Duldt *et al* 1984, p. 151). All of these phases take considerable time, and many groups abandon the process in the first two stages and never progress to the norming or performing stages where work on the task allocated is performed by the group and there is significant output (Duldt *et al* 1984, p. 151).

With the Delphi Technique, the group, panel members, are required to go straight to the 4th stage, performing. They do not ever meet, and hence never have to form a cohesive group or work out conflict such as personalities or dominance of one person (Linstone & Turoff 1975).

Another advantage of the Delphi Technique is that anonymity is always maintained as panel members need never know the identity of other members of the panel (Goodman 1987). The main

advantage of this anonymity is that it encourages opinions that are true and not influenced by peer pressure or group domination (Goodman 1987, p. 730). Members are able to express their true opinions without fear of reprisal or mockery from other members of the panel.

The Delphi Technique also has an unique ability to structure and organise group communication (Goodman 1987, p. 730). Because successive rounds of information are forwarded to each panel member, views can be retracted, altered or added to with the benefit of considered thought and reflection (William & Webb 1994, p. 181). A strong and logical claim to validity is also another advantage of the Delphi Technique. The content and the nature of the study is generated and dictated by the members of the panel, hence the ability of the technique to accurately reflect the subject under study. The Delphi Technique is a quantitative method of research which aims to structure group opinion and discussion without the group ever having to meet face to face (Goodman 1987, p. 729). If the panel members can be shown to be representative of the group or area of knowledge under study, the deemed experts, then content validity can be assumed (Goodman 1987, p. 731). The Delphi Technique has however certain limitations which must be taken into consideration (Goodman 1987).

### *Limitations of the Delphi Technique*

When using the Delphi Technique the researcher needs to be aware of the limitations of the technique, which are few in number, but must be factored in when designing a research study. There is no agreement on the size of the expert panel that is required when using the Delphi Technique. William and Webb (1994, p. 182) state that the literature gives no recommendation on the number of panel members that are a minimum or a maximum. They assert that panel numbers vary greatly from study to study, with little reasoning for the amount chosen (William & Webb 1994, p. 182). The selection of the panel members is also open to scrutiny and once again the literature gives little recommendation for the selection process (William & Webb 1994, p. 182). However, Duffield (1989a p. 17) states, if the members of the panel chosen are deemed experts in the field to be researched and are considered credible by the members of the profession that is under investigation, then the selection process should be simple.

The strong advantage of anonymity also leads to an inherent danger of lack of accountability for expressed views. Considerable comment or in-depth analysis of the items sent to the panel members may not be encouraged (Goodman 1987, p. 732). However, the researcher believes that this problem may be rendered null by the consideration given when selecting panel members and informing them how important the research is and how vital their contribution is to the research.

Goodman believes that the voluntary nature of the Delphi panel may also assist with this problem (1987, p. 732).

Consensus, which is the nucleus of the Delphi Technique, is poorly explained or defined in studies that use the Delphi Technique. Many researchers have allowed the data to decide the level of consensus required, rather than specifying a suitable criterion prior to the research project commencing (Goodman 1987, p. 731). Consensus should be defined prior to any Delphi rounds being sent out to the panel members, and the panel members should be informed of what will be the consensus point.

There is also no evidence to support the contention that the Delphi Technique is reliable. Reid (cited in William & Webb 1994, p. 182) states that no one has studied the comparability of the responses of two different panels selected on the same criterion. The question of reliability therefore remains open.

A panel or group of experts is constructed on the basis of the research question being asked. The use of a panel of deemed experts is based upon the belief that within professions there is an in-built knowledge of the problems and the limits of professional practice (Raven & Walters cited in Duffield 1989c, p. 998). Duffield (1989a p. 17) states that the selection of panel members is crucial to the research project. In practical terms the experts chosen must have professional credibility in order that the profession accept the findings or results of the Delphi rounds. The panel members should qualify as experts because they are representative of their profession and are unlikely to be challenged as the known and accepted experts representing the profession.

The selection of experts, is however, open to personal distortion. The question of how to accurately and reliably define an expert, and if expert opinion is distinguishable from that of non experts, is still largely uncertain (Goodman cited in William & Webb 1994 p. 182). How an expert is defined is hence largely unresolved remains somewhat arbitrary (William & Webb 1994 p. 182). The responsibility is on the researcher to prove and justify the selection procedure used when selecting experts for the Delphi panel. The number of panel members is also dependent on the research question and study. Panel numbers have ranged from ten to 1685 in different Delphi studies. Duffield (1989a p. 17) states, that if the panel is chosen from a homogeneous background, (in other words, a group which has a similar educational or professional background), then ten to 20 panel members may be sufficient.



### ***3.3.1 The Panel Members as Experts***

A 20 member expert panel was selected as the Delphi panel in this research project. These people were chosen for their perceived expert status within the realm of clinical nursing education and nursing. The sampling methods used in this research study are explained later in this chapter. Members of the expert panel included the following representatives:

- Two Nursing Academics from the Australian Catholic University and the University of Wollongong. These academics are involved in Graduate Diplomas of Clinical Education, which are aimed at nurses who teach in the clinical area;
- Two Nurse Educators from the NSW College of Nursing. These Nurse Educators were involved in the five day clinical education courses conducted by the College of Nursing. Nurses who teach in the clinical area or hope to teach in this area in the future attend the clinical education course. The College of Nursing is also a professional body for Registered Nurses within NSW;
- One member of the Australian Nurse Teachers Society Inc. as a representative of the professional body for all nurse teachers in NSW. While clinical educators are only a small portion of this professional body, it is the most appropriate professional body for them to belong to in the state of NSW;
- One member of the NSW Nurses Association, which is the industrial body for all nurses within NSW. The professional development officer from the NSWNA was chosen by the NSWNA as the member to give the industrial point of view, as this person not only gives industrial advice but also professional and career advice to prospective clinical educators;
- Seven staff development/nurse education managers. The managers were from seven hospitals in NSW listed below. Staff Development Managers/Nurse Education Managers have a large responsibility for clinical education and input into the role of the CNEs, with some CNEs even having the manager of staff education as their direct line manager.
- Seven employers of CNEs. The employers were from seven large tertiary referral hospitals in NSW. These hospitals were chosen as it is contended that the employment of CNEs would be greater in a larger hospital than in a smaller hospital.

The hospitals used were:

1. St. Vincent's Hospital, Darlinghurst;
2. St. George Hospital, Kogarah;
3. Royal North Shore Hospital, St. Leonard;
4. Westmead Hospital, Westmead;

5. Liverpool Hospital, Liverpool;
6. Prince of Wales Hospital, / Prince Henry Hospital, Randwick;
7. Royal Prince Alfred Hospital, Camperdown.

These seven hospitals were chosen to participate in the studies for various reasons. It is perceived that CNEs are more likely to be employed in large public hospitals. All seven hospitals are major referral and teaching public hospitals. In smaller hospitals or private hospitals, the role of the CNE like, other nursing roles, may be less distinct due to the smaller number of nursing staff involved. The researcher also perceived that large public hospitals, due to their ward number and bed size, would employ CNEs on different wards and in different areas. Therefore it was contended that more than one CNE in a hospital could be studied at the same time to ascertain differences between their roles within one facility.

The members of the panel were deemed experts because of their association with CNEs and/or with defining the role of the CNEs. All members of the panel have had contact with at least five CNEs on a regular basis. Regular was defined by the author as contact with the CNE more than once per week. The form of contact included management of the CNE, teaching of the CNE, industrial support of the CNE and/or working with a CNE on a daily basis in a clinical or educational capacity. A series of questions was asked of each panel member prior to them being included in the expert panel. The inclusion criteria for panel members are included in Appendix Six. Educational qualifications were not part of the inclusion criteria for the expert panel. However demographic data from the panel clearly shows that the members of this group were well educated with all members of the panel possessing a degree or a higher qualification. 33% of the panel had obtained Masters degrees.

### ***3.4 Creation of Domains of Practice***

Characteristics that were described in the job advertisements and descriptions as well as by nursing authors were used to create domains of practice for the CNE research project. These characteristics describe what a clinical educator requires to teach in the clinical area. The following section outlines what these characteristics are and how the domains were created.

Following a review of relevant literature, job advertisements and job descriptions, domains of practice that were to form the basis of the methodology were created.

It became apparent during the literature review, that there was a consensus between researchers regarding what characteristics were required to perform the role of clinical educator. Major characteristics such as educational ability, were apparent in all the literature. Literature was examined from the UK, USA, Sweden and Australia on the topic of clinical education. Major authors who provided valuable information on the characteristics of a competent clinical educator included: Crotty 1992,1993; Craddock 1993; Smyth 1988; Gerrish 1990; Nehring 1990; Mapp 1982; Thompson 1983; Bolger 1985; Morgan 1991; Reeve 1994; Horsfall 1990; Meleca et al 1981; Morgan and Warbinek 1994; Owen 1993; Howie 1988; Karuhije 1986 and Davies 1991. Job advertisements and job descriptions were also examined.

Based on the findings of the researchers quoted in the literature, five major domains of competency, considered essential for a clinical educator were developed, with separate characteristics then listed under each domain. The lists of characteristics under the domain headings were generated from the review of all the relevant research papers.

The five domains were:

- Clinical
  - Credibility
  - Expertise / Competence
  - Delivery of a high standard of care
  - Advanced clinical knowledge.

These characteristics were generated from work by all the researchers mentioned above.

Expertise in the clinical area was seen as essential by all researchers. This was also supported within the job advertisements and job descriptions.

- Educational
  - Ability to be a classroom teacher
  - Supervisor / Assessor / Facilitator
  - Ability to develop / implement programs
  - Ability to liaise with large groups of people
  - Ability to solve problems.

The educational characteristics were generated mainly from the work of Smyth (1988), Nehring (1990), Thompson (1983) and Morgan (1991). Job advertisements and descriptions also discussed at length, the ability of the applicant to function in an educational capacity.

- Professional - Graduate in tertiary studies
- Competent professional
- Current knowledge in their chosen profession
- Is a positive role model.

Professional characteristics were also taken from the previously mentioned authors, who described them in various degrees. Role modeling was described by all authors as essential for clinical education. There was a consensus that a clinical educator was required to be a competent clinical and professional nurse prior to becoming a clinical educator. Job advertisements and descriptions mentioned professional aspects but mainly in vague terms.

- Managerial - Demonstrates leadership ability
- Has the ability to negotiate
- Able to handle and resolve conflict
- Is organised
- Is able to keep accurate records.

Management characteristics were described mainly by Reeve (1994), Mapp (1982), Karuhije (1986) and Thompson (1983). Job advertisements and descriptions included these aspects within the grouping of administrative responsibilities.

- Interpersonal - Has the ability to communicate
- Is self confident
- Demonstrates empathy
- Personal characteristics.

Interpersonal characteristics were considered by all authors to be essential for not only a competent clinical nurse but also for a clinical educator. Interpersonal characteristics were frequently mentioned in the essential or desirable section of job advertisements.

### ***3.5 Stage 2 - Questionnaire Design***

#### ***First Round Delphi Booklet Design***

A 20 member panel of experts was selected from within the nursing profession. Prior to being included in the list of panel members, each selected member was telephoned and asked if they would be willing to participate in the research project.

What would be expected of them for the research project was then fully explained to them on the telephone. On agreement, they were added to the panel list.

All first round booklets were subjected to a pilot test prior to being sent out to panel members. All first round booklets were mailed out to the panel members at their work addresses and all on the same day. All first round booklets were coded to allow reminder post cards to be sent to participants who had not returned their booklets by the due date. This coded list was kept separate from all returned data. The first package sent to the panel members contained the following components:

- A covering letter explaining the research project and thanking them for being part of the project;
- Stamped self addressed envelope, for ease of return of completed booklet;
- An information sheet on the Delphi Technique;
- A consent form;
- The 1st round booklet.

At the front of the booklet were two pages of information outlining the requirements of the panel member.

Non sexist and non discriminatory language was used throughout the two Delphi round booklets to ensure no bias was introduced. The information sheets were made as clear as possible for ease of reading. All booklets were photocopied back to back to allow the booklets to be as small as possible. A size 11 font was used for ease of reading. Each Delphi round booklets had a distinct color front page to ensure it was distinct as possible from the other round.

The information supplied with the first round booklets, especially the definitions, was regarded as essential. Therefore the information was attached to the booklet for ease of access and to ensure that the information was read. Information such as the return by date and approximate time required to complete the booklet allowed the participant to plan adequate time to complete the booklet and return it to the researcher. An explanation of the process, technique used and the fact that they were a member of a 20 panel team, allowed the participants to feel part of the research team. The main body of the booklets contained five pages under the major headings of the five domains of practice.

In the main body of the booklet each domain of practice was given one blank page. At the top of the page were the domain title and then an explanation of the domain. An example of a competency, which would fit into that domain, was given to assist the panel members in their endeavor. Under the title and explanation were a series of blank lines. These blank pages gave the panel members a large amount of space to write competencies or skill lists. An example of this is:

### **Clinical Domain Of Practice**

This category is the clinical component of the clinical Nurse Educator's role. What competencies does he/she need to possess in the clinical field to work effectively as a Clinical Nurse Educator. E.G. Ability to set priorities for patient care.

At the end of the five pages were the demographic questions. The panel members were informed that this page would be kept separate to the other part of the booklet and complete confidentiality would be ensured.

The demographic questions asked were:

- Age of panel member;
- Gender of panel member;
- Highest qualification reached (nursing and non nursing) by the panel member;
- Number of CNEs in contact with on a regular basis by the panel member.

The above questions were asked to ascertain if there was any age/gender bias, or if the qualifications that one possessed had any bearing on the competencies they perceived were required by a CNE. A consent form was included in the booklet. Once again, the panel members were assured that this form would be kept separate from their booklets and from their demographic profiles. If the booklets were not returned by the due date, a letter was sent to the panel member reminding them of the Delphi Round and requesting they return the first round booklet. If the booklets were still not returned, the panel member was telephoned. If the booklets were still not returned no second round booklet was sent to the individual.

### ***The Likert Scale***

The Likert scale developed in 1932, is the most widely used scaling technique in the world at this present time (Polit & Hungler 1995, p. 279). A scale is a precise means of measuring phenomena, with different types of scales developed to measure psychosocial variables such as attitudes, feelings or opinions (Burns & Grove 1993, p. 374).

The Likert scale technique was designed to determine the 'opinion or attitude of a subject and contains a number of declarative statements with a scale after each statement' (Burns & Grove 1993, p. 374). The technique may use either three, four, five, six or seven categories. One end is the most negative and the other end is the most positive. A neutral category such as unsure or just desirable may, or may not be used. The neutral category may cause problems with the research analysis as study participants may choose to only answer the questions neutrally. However if no neutral category exist then study participants may not answer the question as the survey participants perceive they are being forced to choose (LoBiondo-Wood & Haber 1994, p. 254; Burns & Grove 1993, p. 375).

An instrument using a Likert scale usually consists of ten to 20 items addressing dimensions of a particular issue (Burns & Grove 1993, p. 377). The Likert scale is then scored rather than graded, because attitudes are a reflection of an individual's personal belief system and should therefore not be judged (Butcher 1991, p. 234). The Likert scale can provide certain information that is otherwise difficult to obtain, due to its nature (Butcher 1991, p. 234).

The predictive value of attitude assessment scales such as the Likert scale have not generally been validated by research (Butcher 1991, p. 234). Response bias using this type of scale also represents a threat to the efficacy of the Likert scale, as participants may feel pressure to respond to items in a manner that they feel is socially acceptable or expected (Butcher 1991, p. 234). Butcher (1991) further states that by providing an environment that is accepting of an individual's values and beliefs, response biases may be limited. It is equally important that attitude assessment scales be anonymous so that a true expression of beliefs may be further assured (Butcher 1991, p. 234).

### **CNE Research Study**

The Likert scale was used in the CNE research study in round two of the Delphi. It was used to grade the competency statements as well as the pre-requisites. The scale allowed the panel of experts the opportunity to grade the competencies as to their relevance. A five point Likert scale was used, with 1 being irrelevant to the role of the CNE and 5 being essential to the role of the CNE.

## ***Second Round Delphi Booklet Design***

The second round booklets were only sent to the members of panel who had returned the first round booklets. All second round booklets were mailed out on the same day to the panel members' work addresses to ensure personal privacy. All second round booklets were subjected to a pilot test prior to being forwarded to panel members. A stamped self-addressed envelope was included for ease of return of the booklets.

The second round booklets contained only information pages and pages which listed the competencies generated under the domains. The information sheets contained similar information to the first round including: a return by date; approximate time to complete the booklet; process to complete the second round; an explanation of the Likert scale used; how the competencies that were expressed in the second round were generated; references used; an explanation of why one extra domain was created; the future of the data generated from the second round; and contact telephone numbers of the researcher.

The main body of the booklet consisted of 41 competency statements listed under six domains. The five domains from the first round were used as well as a sixth domain as a result of data analysis carried out on the first round. The competencies comprised a statement, a verbal description and two to three elements. This is the normal standard for the writing of competency statement. Next to each competency statement was a rating scale, the Likert scale. The competency statements were generated from the first round. The statements addressed only one competency at a time. The language used was similar to that of the ANCI competencies and the ANTS competencies and is generally acceptable to the nursing profession (ANRAC 1990 and ANTS 1994).

The scale was a five point Likert scale with the following headings :

- |    |     |                  |   |
|----|-----|------------------|---|
| 1. | IRR | Irrelevant       | This competency is not what is required of a CNE;       |
| 2. | NE  | Not essential    | This competency is not essential for a CNE;             |
| 3. | D   | Desirable        | This competency is desirable, but not essential;        |
| 4. | HD  | Highly desirable | This competency is highly desirable, but not essential; |
| 5. | ESS | Essential        | This competency is essential for a CNE.                 |

The last page of the booklet contained a list of qualifications. Each panel member was requested to rank each of the qualifications using the rating scale that had been used in the first round. The qualifications were generated from round one data.



### ***Survey Booklet Design***

Thirty practicing clinical educators were surveyed after the second Delphi round. Permission was requested from the Directors of Nursing to approach clinical educators within their hospital. Educators from the hospital were then telephoned and the research project was explained.

The clinical educators approached to be a part of the survey were from three main sub categories or groups:

1. Those known by other titles such as, Clinical Nurse Specialist - skill development;
2. Those employed for one ward or unit only;
3. Those employed for a specific target group such as new graduate registered nurses.

Ten educators were sought from each sub-category. These three sub categories were identified by analysis of job advertisements and anecdotal evidence, such as manager's discussions, and CNE discussions. It is acknowledged that there may be more than these three sub categories, however due to limited data it was difficult to ascertain what other sub categories could be found. Members of these three sub categories all operate as clinical nurse educators, irrespective of differences in their roles and role descriptions.

The members of the first sub category were the most difficult to identify due to their different work titles. However, two criteria were used to group individuals into this sub category. Firstly, if an individual's job description clearly stated that clinical education of qualified staff, either registered nurses or enrolled nurses, was the main nucleus of their job. Secondly, if the manager of the individual employed in the position believed that clinical education was their main role. If an individual satisfied both criteria then they were included in the study. The other two sub categories were easier to identify as they were stipulated by the working title of CNE. The survey questionnaire and related information was mailed to all the survey participants on the same day. All survey books were subjected to a pilot test prior to being forwarded to survey participants. All survey booklets were coded to allow reminder post cards to be sent to participants who had not returned the booklet by the due date. This code list was kept separate from any returned data. The information mailed included the following: a covering letter thanking them for being part of the research study; a stamped self addressed envelope; contact details of the researcher and the survey booklet.

The survey booklet was divided down into the following components:

- Information pages. These pages described the research project and how the listed competencies had been generated;
- A list of competencies. Next to each competency were two boxes for the participants to record their decision;
- A list of demographic questions;
- A consent form.

The information pages contained relevant information to assist the participant to complete the survey booklet. Information included in the information pages were:

- Approximate time to complete the booklet;
- Date of return for the booklet;
- Aim of the research project;
- How the competencies were generated;
- An explanation of how to complete the survey booklet;
- An explanation of the scale used;
- A statement regarding confidentiality of the data;
- Definitions of a competency. The definition of a CNE used in this research study, and a definition of the six domains used;
- An area for comments. The researcher welcomed comments.

The scale, agree or disagree was used for the survey booklets. The participants of the survey had to make a decision, choosing between these two statements. This scale was used because the researcher wished to ascertain if the competencies generated by the expert panel were what practicing educators perceived were necessary. The texts refer to this as neutrality. Either this competency was required of a CNE, or it was not.

The main body of the survey contained 24 competencies, which had been generated by the first and second round of the expert panel. Competencies were listed under the six domains used in the 1st and 2nd rounds of the Delphi. Each competency comprised a competence statement, a verbal description and two to three elements. The scale was on the side of the competency and tick boxes were used.

At the end of the 24 competencies was a list of educational qualification pre requisites and clinical experience pre requisites for CNEs.

This data had been generated from the first and second round of the Delphi. Once again, the educators were asked to agree or disagree that these prerequisites were required for a CNE.

Demographic questions were asked after the main body of the survey. Survey participants were assured that all demographic data would be kept separate from the main survey booklet to ensure confidentiality. Demographic questions asked of the survey participants included:

- Age;
- Gender;
- Position title;
- Award grade of position;
- Highest nursing qualification obtained;
- Educational courses attended;
- Length of time in present position;
- Level of responsibility, (i.e. one ward vs hospital);
- What was the position title, held by direct line manager.

A series of examples were supplied with each demographic question asked. Examples were taken from the work of Duffield *et al* (1993 a&b) who had undertaken research of competencies for NUMs and CNSs. The demographic questions were asked to ascertain if there was any bias in the answers given. Certain factors, such as direct line management for example may have a large impact on the competencies that people feel a CNE should possess.

Questions about the position title and award grade that the participant held gave an indication of how clinical educators were graded in their organisation. It also identified the different titles used by different organisations to describe clinical educators. A consent form was attached to the back of the survey booklet. The consent form was a generic form. Complete confidentiality was assured to each member of the survey. All consent forms were removed from the main body of the survey booklet on return to ensure this confidentiality. Each member was also informed that they could withdraw from the survey at any time and all data relating to them would be destroyed. If a survey booklet was not returned by the due date a postcard was sent to the participant. Once a period of two weeks had elapsed, no more contact was initiated. Twenty nine survey booklets were returned out of 30.

### **3.5.1 *Pre-Requisite Data***

In the first round of the Delphi, members of the expert panel mentioned certain qualifications that they believed CNEs needed to perform their role. These qualifications ranged from being a Registered Nurse to holding a master's degree. The majority of the panel members mentioned qualifications and attendance at educational courses. It was decided by the researcher to include a comprehensive list of qualifications in the second round of the Delphi to allow the panel members to acknowledge what they perceived were qualifications that were essential for a CNE to possess. After the second round of the Delphi, pre requisites that scored three or above, were included in the survey.

### **3.6 *Ethical Considerations***

Ethical considerations in research first gained significance and attention after the 2nd World War, when medical research that had been carried out by Nazi physicians caused international outcry and lead to the formation of guidelines titled the Nuremberg Code (LoBiondo-Wood & Haber, 1994, p. 315). With the formation of international standards and codes for research practice, three major ethical principles became clear. LoBiondo-Wood & Haber (1994, p. 318) assert that these are major considerations in any research project that is undertaken. The principles are:

1. Respect for Persons;
2. Beneficence;
3. Justice.

Any person undertaking research has an 'ethical responsibility to recognise and protect the rights' of their human research participants (Burns & Grove 1993, p. 94). Burns and Grove (1993) believe that the human rights that may require protection in research projects consist of:

1. The right to self determination;
2. The right to privacy and dignity;
3. The right to anonymity and confidentiality;
4. The right to fair treatment;
5. The right to protection from harm and discomfort.

#### **1. The right to self determination**

This right is based on the ethical principle of respect for all people. It declares that people are capable of determining what is right for them or good for them. Hence, people should be treated as 'autonomous agents, who have the freedom to conduct their lives as they choose without external controls' (Beauchamp & Walters 1983, cited in Burns & Grove 1993, p. 94).

Violations of the right to self-determination can include coercion, covert data collection and deception (Burns & Grove 1993, pp. 94-5). People with diminished autonomy such as children, the mentally impaired, and the terminally ill or subjects confined to institutions have special considerations regarding their right to self-determination (Burns & Grove 1993, p. 96).

### **CNE Research Study**

To ensure that the research study was ethical in the eyes of the research participants and participating institutions the following information was imparted to each research participant. This information was intended to aid them make an informed decision regarding their involvement in the research:

- Nature and purpose of the research. This included the proposed publication of the final results of the research;
- Reasons behind the selection of research participants;
- The proposed involvement of each research participant, including time spent;
- The data collection process;
- The option to withdraw at any time during the research project without any repercussions. All research participants were informed that data specifically related to them would be destroyed at the time of their withdrawal.

All research participants were assured that if they did not wish to participate in the research study then there were no consequences to this refusal. All research participants were over the age of 18 and were deemed capable of making an informed decision regarding their involvement in the project.

### **2. The right to privacy**

Privacy is defined by Burns and Grove (1993, p. 98) as ‘the freedom an individual has to determine the time, extent, and general circumstance under which private information will be shared with or withheld from others’. Private information can include a persons’ attitudes, behaviors, thoughts, feelings, opinions and records (Burns & Grove 1993, p. 98).

### **CNE Research Study**

The research participants’ privacy in this research study was maintained by various methods. Work addresses were used for the distribution of research information, questionnaires and letters to ensure personal privacy.

Instruments used in this project were pilot tested prior to utilisation, to ensure questions were non-sexiest and inoffensive. Participants were also informed of the proposed use of all data collected.

### **3. The right to anonymity and confidentiality**

The right to anonymity and confidentiality is based on the right to privacy. Anonymity exists if 'the subject identity cannot be linked, even by the researcher, with his or her individual responses' (ANA 1985; Sasson & Nelson 1971, cited in Burns & Grove 1993, p. 99). Confidentiality is the management of the research subject's private information that is shared with the researcher (Burns & Grove 1993, p. 99).

#### **CNE Research Study:**

All participants in the research study were given a code, against which all the data collected was recognised. Demographic details were kept separate and secure from the other data collected. Once a completed booklet was returned to the researcher, the demographic sheets were removed and filed in a separate box away from the main body of the Delphi rounds or survey. A code sheet which displayed participants names and their codes was kept away from all data locked in a secure place (filing cabinet). Consent forms were removed from the main body of the Delphi round and survey, filed and locked away with the master code sheet. All data still remains separate.

### **4. The right to fair treatment**

The right to fair treatment 'is based on the ethical principle of justice', which states that 'every person should be treated fairly and should receive what he or she is due or owed' (Beauchamp & Walters 1982, cited in Burns & Grove 1993, p. 100). Burns and Grove (1993) believe that in research the right to fair treatment principle is imperative at the selection process of subjects, and in the treatment of subjects who participate in the research or who choose not to participate.

#### **CNE Research Study**

The sample selection for this process is described later in this chapter, however study participants were selected for their knowledge and expertise in the field of nursing and nursing education. This field was the area that was being researched. All benefits promised to the research participants have been fulfilled.

## **5. The right to protection from discomfort and harm**

This right is the right to protection from discomfort and harm and is based on the ethical principle of beneficence, which states that a 'person should strive to do good, but at least do no harm' (Burns & Grove 1993, p. 101). Reynolds (1972, cited in Burns & Grove 1993) identified five categories of research studies based on the level of discomfort which the research could cause. They are: no anticipated effect; temporary discomfort; unusual levels of temporary discomfort; risk of permanent damage; and certainty of permanent damage.

### **CNE Research Study**

This project fits into the temporary discomfort category of the classification. The study participants were required to fill out questionnaires and return them to the researcher. The study also required the participant to take a period of time and consider the research questions being asked.

## **6. Informed consent**

Informed consent is defined by the Code of Federal Regulation (1983, cited in LoBiondo-Wood & Haber 1994, p. 322) as 'the knowing consent of an individual or his/her legally authorised representative, under circumstances that provide the prospective subject or representative sufficient opportunity to consider whether or not to participate without undue inducement or any element of force, fraud, deceit, duress, or other forms of constraint or coercion'.

### **CNE Research Study**

All components of informed consent have been addressed in this study. All study participants were informed verbally as well as by written communication of the purpose of the research study; why the study was being conducted; why they were selected; and how the study would be conducted. Study participants were given the opportunity to ask questions over the phone or in a written manner.

The possible risks and discomforts to the study participants were outlined. However as the only possible risks and discomfort were ethical, procedures were put in place to ensure no breaches of confidentiality or privacy occurred. Benefits of the study were explained to the study participants. There were no alternatives possible. Anonymity and confidentiality were assured and were obtained through the measures outlined. The researcher telephone numbers and contact details were located on all research documents so that study participants could contact the researcher to discuss any queries or problems they were experiencing with the research study.

All study participants were given the option to withdraw at any time without any penalty to themselves. Their data would be destroyed at the time of their withdrawal.

A consent form outlining the above components was used for the Delphi rounds and for the survey. These two consent forms are included in Appendix seven and nine with their respective booklets.

## **7. Institutional review**

Institutional Review is when a committee of peers (Burns & Grove 1993, p. 109) examines a research study. Burns and Grove (1993) assert that when a research project involves either human or animal subjects then institutional review is required.

### **CNE Research Study:**

Institutional approval was gained from the University of Wollongong Human Research Ethics Committee to conduct the research study (Appendix four). As the members of the Delphi panel were all adults and were being asked due to their expert status there was no requirement to seek other approval. Directors of Nursing of the Hospitals included were approached prior to the CNEs being included in the survey, as they were employees of hospitals, and it was their employing role that was being examined. Ethics approval was required for one hospital to fulfill the requirements of a local policy. This approval was gained prior to staff being involved in the survey. This approval is included in Appendix three.

## **3.7 Target Population**

A population is defined as a well-defined group of subjects that have certain specific proprieties, or meet a designated set of criteria (LoBiondo-Wood & Haber 1994, p. 288; Skodol Wilson 1989, p. 256; Polit & Hungler 1995, p. 33). An eligibility criteria exists for all populations to ensure homogeneity. LoBiondo-Wood and Haber (1994, p. 228) state that this criteria may be age, specific knowledge, gender, illness or other criteria that sets a group apart .

LoBiondo-Wood and Haber (1994, p. 289) and Polit and Hungler (1995, p. 33) believe that an accessible population is a group of people who meet the criteria and are readily available.

An accessible population allows the researcher ease of access, however ease must be considered in line with correct sampling methodology (LoBiondo-Wood & Haber, 1994, p. 289).



### **CNE Research Study:**

The main target populations of the above study were Clinical Nurse Educators and registered nurses who worked as clinical educators. These registered nurses were required to have the clinical education of qualified staff as the main focus of their position. The population includes all nurses in these positions within NSW.

The accessible population was CNEs and nurses who acted as clinical educators of trained staff who worked in public hospitals within NSW. This group was easily identified and accessible through their place of work. Three distinct sub categories of clinical educators were identified. These are:

1. Clinical educator's known by titles other than CNE, such as CNS - skill development;
2. CNEs employed for one specialty or ward/unit, as per the NSW state award.;
3. Clinical educators employed for a specific target population – (i.e. TENs or new graduate registered nurses).

A proportion of each sub category was included in the large sample. For example, each sub category formed 33% of the total sample size. The researcher selected subjects through a non-probability sampling methodology. A full description of the sampling methodology is outlined later in this chapter. The two part criteria for inclusion in the CNE survey are in Appendix six.

### **3.8 *Sampling and Sampling Criteria***

Sampling is a 'process of selecting a portion of the designated population to represent the entire population' (LoBiondo-Wood & Haber 1994, p. 290; Polit & Hungler 1995, p. 230). A sample therefore is a subset or sub group that makes up a population (LoBiondo-Wood & Haber 1994, p. 290; Polit & Hungler 1995, p. 230). The purpose of sampling as stated by LoBiondo-Wood and Haber (1994) is to 'increase the efficiency of the research' project. It is not often feasible to include the whole population in a research project, hence a sample of the population allows the researcher to draw inferences and make generalisations about the population (LoBiondo-Wood & Haber 1994).

LoBiondo-Wood and Haber (1994, p. 290) and Polit and Hungler (1995, p. 230), state that to make accurate inferences and generalisations about a population, a sampling plan or strategy is used to map out how to acquire a representative sample of the population.

There are many types of sampling strategies that can be used and these are divided into two main groups: non-probability sampling and probability sampling (Polit & Hungler 1995, p. 231). Under these two groups are subsets or other types of sampling strategies. Polit and Hungler (1995) assert that the types of sampling include:

1. Non probability sampling.

Polit and Hungler (1995, p. 231) believe that this type of sampling involves the selection of a sample by a non random selection process. Polit and Hungler identify three different subsets (1995, p. 231) of non-probability sampling: convenience sampling, quota sampling, and purposive sampling.

2. Probability sampling

LoBiondo-Wood and Haber (1994, p. 295) assert that this type of sampling involves the random selection of elements from a population. Four sub sets are identified under probability sampling by LoBiondo-Wood and Haber (1994, p. 295), these are: simple random sampling, stratified random sampling, cluster sampling and systematic sampling.

### **CNE Research Study**

Purposive sampling, a type of non-probability sampling was carried out for both parts of the research study. Non probability sampling is known to be less rigorous than the probability sampling method, however such samples are often more feasible for the researcher to obtain (LoBiondo-Wood & Haber 1994, p. 291). LoBiondo-Wood and Haber (1994, p. 294) state 'that purposive sampling is used when the researcher's knowledge of the population and its elements is used to hand pick the cases to be included in the sample'.

Members of the Delphi expert panel were selected due to their known expert status in the field of nursing and nursing education. Survey participants were also researcher selected due to their employment status as clinical educators. This type of sampling was used because of the researcher's extensive knowledge of the population that was being studied. Quota sampling was used to ensure equal representation of each sub category in the survey.

### ***Delphi Rounds***

In the Delphi Rounds a 20 member expert panel was identified. Criteria for expert status were identified and members of the panel were selected if they matched the criteria.

An expert was defined as a member of the nursing profession who had considerable knowledge of and regular contact with CNEs. This contact could be in the form of line management of the CNEs, teaching of the CNEs, industrial support and knowledge of the CNE award or working with CNEs as peers. Regular contact was defined as contact with a CNE on a minimum of a weekly basis. Contact could include, discussing their role, line management, teaching or support.

The number of CNEs with whom the individual has contact is important and for research purposes must be greater than three, on a regular basis. The number is important, because the perceptions of a single CNE could be very different to that of a group of CNEs. The experts must also occupy nursing positions at a higher level than a CNE. Duffield (1989 a&b) states that within one population there is not a large percentage of experts, therefore this sub group of experts would be unique and easily recognised by their peers.

### ***Survey***

Purposive sampling was also used for the survey group. CNEs are a comparatively small group and are therefore easily identified by their work title. For research purposes a definition of a CNE was written. Members of the population who satisfied the criteria and were accessible were included in the sample. For this study a CNE is defined as: *an RN employed by a health facility to carry out clinical education and/or the coordination of clinical education activities for qualified nursing staff. This function is to be their main activity while in employment. The individual is to be supernumerary while they are carrying out this role. It is acknowledged that clinical educators can be attached to a ward/unit or to a hospital in a general capacity.*

Three distinct sub categories of CNEs were identified, as discussed earlier, prior to sample identification for the survey. Quota sampling, where the researcher identified elements of a population and used this knowledge to build some representativeness into the sample was used here to ensure that equal proportions of the sub categories were included. Each sub category made up 33% of the total sample.

### ***3.9 Bias / Control***

Bias is defined by Burns and Grove (1993, p. 762) as 'any influence or action in a study that distorts the findings or slants them away from the true or expected.' Bias may be introduced by the researcher or by the subjects who are being researched. Bias can enter the research data whenever there is an opportunity for something other than the main variable of interest to affect the research study (Polit & Hungler 1995, p. 149).

Polit and Hungler (1995, p. 149) state that various controlling mechanisms can be introduced to control bias, however too much control can introduce a bias in itself. These mechanisms identified by Polit and Hungler (1995, pp. 149-150) are: control of variables; use of double blind procedures; randomisation; repeated measures; homogeneity; inclusion of extraneous variables; and matching and analysis of co-variances.

### **CNE Research Study**

Items that may have introduced bias to this study were:

1. Position of the researcher.

The researcher was in a senior management position within an Area Health Service from which a percentage of the study participants were drawn. This position may have influenced study participants in filling out Delphi forms or survey questionnaires. Explaining to all study participants that the results were part of an academic study, and not work related controlled this bias. Study participants were reassured that complete anonymity and confidentiality would be maintained throughout the study and afterwards, through the use of codes, so the study participants work area would not be linked to their name.

2. Selection of Experts.

The possibility of bias introduced through the selection of experts, was controlled by the use of a specific selection criteria. The criteria are outlined in appendix five.

3. The use of the group technique such as the Delphi technique.

Any group technique such as a focus group may cause a bias of answers due to the perception of participants wanting to give the right answer. However the Delphi technique provides consensus of expert opinion, without the bias which can readily occur in other group techniques, for example committee meetings or group discussions (Williams & Webb 1994, p. 181). This is mainly due to the study participants not meeting face to face at any time.

4. Study participants wishing to give the right or correct answer.

In a survey or questionnaire, study participants may wish to give the right answer to please the researcher. This bias was eliminated by stressing to the study participants that there was no right or wrong answer. The only correct answer was the one that suited them and their position the best. As all questions were about a position and not directed personally this also helped to eliminate bias.

### **3.10 Validity**

Validity refers to the degree to which an instrument accurately measures what it is supposed to be measuring (Polit & Hungler 1995, p. 353; LoBiondo-Wood & Haber 1994, p. 365; Burns & Grove 1993, p. 264). Polit and Hungler (1995) and Burns and Grove (1993) believe that validity is an important concern throughout the research process but is also extremely difficult to establish at times

A valid instrument is said to be so if it truly reflects the concept it is supposed to be measuring or to have measured (LoBiondo-Wood & Haber 1994, p. 368). Polit and Hungler (1995, p. 354) assert that an instrument can be reliable without being valid, however it cannot be unreliable and valid at the same time. There are many different types of validity that vary according to the kind of instrument used in a research study and in the purpose of the research study. The types identified by Polit and Hungler (1995), LoBiondo-Wood (1994) and Burns and Grove (1993) are:

#### **1. Content validity**

This type of validity is concerned with the content and the sampling adequacy of the content area being measured (Polit & Hungler 1995, p. 354; LoBiondo-Wood & Haber 1994, p. 369).

Content validity is of special concern or relevance to individuals who are designing a test to measure knowledge in a specific content area (Polit & Hungler 1995, p. 354). Content validity of an instrument is necessarily based on judgment, as there is no completely objective method to assess content validity.

A subtype of content validity is face validity. Face validity as identified by Polit and Hungler (1995, p. 354) and LoBiondo-Wood and Haber (1994, p. 369) refers to the instrument and if the instrument is measuring the appropriate construct, or gives the appearance of measuring the construct. Face validity may be helpful in the tool development process if other types of validity have been established (LoBiondo-Wood & Haber 1994, p. 353; Polit & Hungler 1995, p. 369).

#### **2. Criterion related validity**

This type of validity indicates to what degree the subject's performance on the measurement tool and the subject's actual behavior is related (LoBiondo-Wood & Haber 1994, p. 353). Two forms of criterion related validity identified by LoBiondo-Wood and Haber (1994, p. 353) are concurrent validity and predicative validity.

### 3. Construct validity

This type of validity is 'based on the extent to which a test measures a theoretical construct or trait. It attempts to validate a body of theory underlying the measurement and testing of the hypothesised relationships' (LoBiondo-Wood & Haber 1994, p. 370). The establishment of construct validity is a complex and challenging process, often involving several studies and several approaches (LoBiondo-Wood & Haber 1994, p. 370; Polit & Hungler 1995, p. 356).

Polit and Hungler (1995, p. 359) assert that validity is not an all or nothing characteristic, rather it can be said it is a question of degree. Validity is not tested. Rather the validity of an instrument is supported or not supported as the case may be (Polit and Hungler 1995).

### CNE Research Study

The validity of the two instruments used in the research study is supported.

#### 1. The Delphi technique

Face validity of the Delphi technique was gained during the pilot study where the instrument was proved to measure what it was required to measure. The Delphi technique's claim to validity, is its ability to examine and accurately reflect the subject under study, because the very nature and content of the study is generated and dictated by its panel members. If the panel members participating in the study can be shown to be representative of the group or area of knowledge under study then content validity can be assumed (Goodman 1987, p. 731). The members of the expert panel in the research have been shown to be representative of experts within their field.

Furthermore, Caves (1981, cited in Williams & Webb 1994, pp. 181-2) asserts that when the skills of professional ability are an objective of the research question, then the use of methods like the Delphi technique improve the validity of the study from two aspects. Firstly, the skills identified have high face validity, that is, in the present study, they appear to be the most relevant skills to the people involved (Caves cited in Williams & Webb 1994, p. 181).

Secondly when consensus is achieved through the use of multi rounds, it can be argued that there is evidence of concurrent validity, in that the experts themselves have both identified and agreed upon, the requisite competencies (Caves cited in Williams & Webb 1994, p. 181).

#### 2. Survey

The survey questionnaire obtained face validity through the use of a pilot study. The instrument appeared to measure what was expected of it.

Content validity was also apparent with the use of this instrument. Because a panel of experts generated the survey the questions asked carried a high content validity. The sample was representative of the population which assisted with content validity.

### ***3.11 Reliability***

Reliability is defined as the extent to which an instrument produces the same results on repeated measures in a consistent and accurate way (LoBiondo-Woods & Haber 1994, p. 373; Polit & Hungler 1995, p. 347; Burns & Grove 1993, p. 337). Polit and Hungler (1995, p. 347) assert that an instrument can be said to be reliable if it measures accurately the attribute that is being researched.

There are three main attributes of reliability for quantitative studies that are assessed when examining the reliability of an instrument. They are:

#### **1. Stability**

‘The stability of an instrument refers to the instruments ability to produce the same results with repeated testing (LoBiondo-Wood & Haber 1994, p. 373).’ Polit and Hungler (1995, p. 348) state that the stability of an instrument is evident not only if it produces the same results repeatedly, but also if the instrument is not susceptible to external factors from one administration to the next.

#### **2. Homogeneity**

The homogeneity of an instrument is said to exist when all the items within an instrument measure the same concept or characteristic (LoBiondo-Wood & Haber 1994, p. 374).

An instrument can be said to be homogeneous if all the questions in a questionnaire or in an interview are measuring the same concept such as empathy or competence (Polit & Hungler 1995, p. 350).

#### **3. Equivalence**

An instrument is said to exhibit equivalence if the instrument produces the same results when similar or parallel instruments or procedures are used (LoBiondo-Wood & Haber 1994, p. 373).

### **CNE Research Study**

In this research study two main instruments were used. The Delphi technique and a survey questionnaire. Reliability of these instruments will be discussed individually. The researcher believes that the Delphi technique possesses stability, homogeneity and equivalence.

The instrument was stable because it was administered in a pilot study to non members of the sample group but who were members of the population. Their results yielded similar results to the sample group. The instrument was administered to 20 different members of the sample group and similar results were yielded, therefore stability and equivalence were proven. The concept of competency of CNEs was the only characteristic that was being measured and hence homogeneity was also confirmed.

The survey questionnaire also exhibited stability, homogeneity and equivalence. A pilot test of similar non-sample members was carried out and the survey was administered to 30 different members yielding similar results, hence stability and equivalence were proven. Homogeneity was also supported in the survey as there was only questions relating to the competency of CNEs asked.

### ***3.12 Pilot Studies***

Polit and Hungler (1995, P. 34) describe a pilot study as a small scale version or trial run of the major study. They state that a pilot study is conducted to ‘obtain information for improving the proposed research study or assessing it for feasibility (Polit & Hungler 1995, p. 34).’ Burns and Grove assert that the refinement of research instruments is often a direct result of conducting a pilot study (1993, p. 48). During the pilot study, questionnaires, interview questions or other research instruments may be tested. Polit and Hungler (1995, p. 34) believe that a pilot study must be conducted with individuals who possess the same characteristics as those of the sample population. If extensive revision of questionnaire or other instruments are required due to the comments by the individuals involved in the pilot study, then another pilot study may need to be conducted prior to the research study being implemented (Polit & Hungler 1995, p. 35).

Two pilot studies were conducted prior to the implementation of the CNE research study. The pilot studies were conducted to pre-test the Delphi booklets and the survey questionnaire. Information that was forwarded with each stage was included in each pilot test. The first pilot study was undertaken prior to the first round Delphi booklet being forwarded to the 20 expert panel members. The 1st round booklet, consent form, information sheets and demographic questions were forwarded to five individuals. These individuals were managers or educators who possessed similar characteristics to members of the proposed sample but were not part of the main research study. The five individuals involved in the pilot study were given only the information that it was anticipated members of the expert panel would be given.



They were requested to examine all information and provide feedback to the researcher on the following questions:

1. Clarity of the instrument. Was the information easy to read and to understand?
2. Semantics. Was the use of grammar and terminology relevant? If terminology was used such as acronyms, was it explained adequately?
3. The depth of information provided. Was this adequate? Was it enough to allow an individual to complete the booklet and to understand why the research study was being conducted?
4. Did the information flow? Was the reader able to complete the booklet in the stages that it was presented in, without having to revert back to get information?
5. Was the content adequate? Was the individual able to complete the booklet without having to access other information?
6. What are their reactions to the project ?
7. What is their overall impression of the proposed research study?
8. How long did it take for them to complete the booklet?

All five members of the pilot study returned their booklets and comments within the 14 day deadline given to them. This quantity of time was the same amount of time that was anticipated would be given to the expert panel. Comments were received from four members of the pilot study, with one member stating that there were no problems with the booklets or information sheets. The other members provided the following information:

- The booklet took approximately 30 to 40 minutes to complete.;
- Researcher name and contact details to be included in information sheets for ease of contact;
- Slight grammar changes to the information sheets such as the use of words that were slang or were technical and may not be understood by all. For example, the use of ANRAC instead of spelling out the Australian Nurse Registration Authority Conference;
- More information to be included about the use of the Delphi technique. As this was an unknown technique for four out of the five members of the pilot study, they perceived more information on this technique and why it was used would assist the research participant to be fully informed;
- The use of competencies created much discussion. Members of the pilot study were all aware of what constitutes a competency however they perceived they would have difficulty in creating competencies. A suggestion was to include an example of other competencies in each domain to assist the research participant.

- Overall the information was found to be easy to follow and allowed an understanding of the research process;
- The consent form was found to be easy to understand and required no changes;
- The demographic questions were also easy to understand and were considered non intrusive to the individual;
- The members of the pilot study deemed the project worthwhile. They believed that the research participants would find the study interesting and hence would be more likely to fill out and return the booklets.

All changes were made that were recommended by the individuals involved in the pilot study. As the changes were mainly minor it was not considered applicable to conduct another pilot study for the first round booklet and information data. Face validity was hence achieved through this pilot study.

The second round Delphi booklets were not subjected to a pilot study as the second round booklet was a combination of comments received from the expert panel in the first round. Therefore the panel members were being given back their own and other members competencies for comment and grading. The second pilot test conducted for the CNE research study was the pilot study of the survey questionnaire and related information. Five educators who possessed similar characteristics as the research participants, such as being involved in clinical education, were requested to be part of a pilot study. The educators were not part of the research study and had not been part of the first pilot study that examined the first round Delphi booklet.

The five individuals were requested to examine all information provided and provide feedback to the researcher on the following questions:

1. Clarity of the instrument. Was the information easy to read and to understand?
2. Semantics. Was the use of grammar and terminology relevant? Were acromyons and other potentially ambiguous terminology explained adequately?
3. The depth of information provided. Was this adequate? Was it enough to allow an individual to complete the questionnaire and to understand why the research study was being conducted?
4. Did the information flow? Was the reader able to complete the questionnaire in the stages that it was presented in, without having to revert back to retrieve information?
5. Was the content adequate? Was the individual able to complete the questionnaire without having to access other information?

6. What was their reaction to the project ?
7. What was their overall impression of the proposed research study?
8. How long did it take for them to complete the questionnaire?

Only four members of the pilot study returned their questionnaires and comments to the researchers. These individuals made the following points.

- There were small typographical errors such as the use of there instead of their;
- Grammar changes were required, for example an instead of a;
- The amount of information on how the competencies had been generated was excessive and could be more concise;
- Overall the information was easy to read and to follow;
- The questionnaire took between 10 to 20 minutes to complete;
- The pre requisites were lengthy and could also be more concise;
- The consent form was easy to read and to understand;
- The demographic questions were considered lengthy but not intrusive and easy to answer with a minor change to the question on direct line management;
- The pilot study members overall found the questionnaire easy to follow and interesting to fill out. They wished to discuss the outcome of the project as it was of an interest to them. This was a good point and one that may assist in the return of the questionnaires by the research participants.

All changes were made on the advice of the pilot study. As the changes were only minor it was perceived that it was not necessary to re pilot study the questionnaire and related information. The researcher considered that face validity was obtained for the survey questionnaire and related information due to the pilot study.

### ***3.13 Statistical Tests Employed***

Statistical analysis was conducted on the results of the second round Delphi. Descriptive statistical analysis was the most appropriate analysis tool to be used with this data due to the nature of the initial research questions. LoBiondo-Wood and Haber (1994, p. 399) state that 'descriptive statistics may be used in isolation if the study conducted is an exploratory one as the aim or purpose of the data analysis is to describe the characteristics of a population.'

Describing the characteristics of a population, the CNEs, is the main aim and purpose of this research project. Descriptive statistics allow the researcher to break down research data collected into manageable amounts and to describe and summarise the data (LoBiondo-Wood & Haber 1994, p. 386; Dempsey & Dempsey 1992, p. 92). Descriptive statistical analysis can identify various characteristics of the data.

Included in descriptive statistical analysis are measures of central tendency and measures of variability. Measures of central tendency include the mean, the mode and the medium measurements, while measures of variability include the range and the standard deviation (LoBiondo-Wood & Haber 1994, p. 386). Measures of central tendency describe the average member of the sample, while measure of variability describe how much dispersion there is in the sample used (LoBiondo-Wood & Haber 1994, p. 386).

The following descriptive statistical tests were carried out on the data of the second round. The mean, the medium, and the mode as measures of central tendency and the range and the standard deviation as measures of variability. Each of these statistical tests was carried out for each competency statement and for each pre requisite. The central tendency tests were used for the data to 'describe the average member of the sample' (LoBiondo-Wood & Haber 1994, p. 387). The variable tests were used for the data 'to describe how much dispersion is in the sample' (LoBiondo-Wood & Haber 1994, p. 387).

It was decided before any statistical tests were carried out on the competency statements that only competency statements that rated a mean of four or above, (highly desirable or essential) would be included in the survey. This decision was made due to the literature on the Delphi technique clearly stating that consensus must be decided prior to any research being undertaken and any data analysis being carried out (Goodman 1987). As the pre requisites were more of an unknown quality, it was decided to wait until after data analysis to decide what pre requisites would be included in the survey.

### ***The Mean***

The mean is often thought of as the arithmetic average, and is the most commonly used measure of central tendency (LoBiondo-Wood & Haber 1994, p. 394; Dempsey & Dempsey 1992, p. 94; Burns & Grove 1993, p. 475; Polit & Hunger 1995, p. 381). The mean is also the most constant or least affected by chance measurement, and it is more stable than the medium or the mode measurements (LoBiondo-Wood & Haber 1994, p. 394).

To obtain a mean you are required to sum all the scores in a sample and divide them by the number of subjects or number of scores being summed (Burns & Grove 1993, p. 474; Polit & Hunger 1995, p. 381). The mean is the pivotal point of the statistical tests carried out on the competency and pre requisites statement. It is the mean that will decide what competencies and pre-requisites that will be carried forward onto the survey.

### ***The Medium***

The medium is a descriptive statistic that is a measure of central tendency that represented the exact middle score in a distribution of all scores within a sample (Polit & Hungler 1995, p. 646). The medium is the middle score or the score where 50% of the scores are above it, and 50% of the scores are below it (LoBiondo-Wood & Haber 1994, p. 393; Dempsey & Dempsey 1992, p. 95). The medium is also known as the 50th percentile and is obtained by rank ordering all of the scores in the sample (Burns & Grove 1993, p. 475). The medium is the most appropriate measure of central tendency for ordinal data and is also frequently used in non parametric analysis (Burns & Grove 1993, p. 475).

### ***The Mode***

The mode is a descriptive statistic that is a measure of central tendency. The mode is the score or value that occurs most frequently in a distribution of scores (Polit & Hungler 1995, p. 646). The mode is however an unstable measurement and not often regarded as a worthwhile measurement (LoBiondo-Wood & Haber 1994, p. 392). The mode can be used to describe the typical subject or to identify the most frequently occurring value or score (Burns & Grove 1993, p. 475). A sample may however have more than one mode within it as two or more numbers may occur just as frequently as each other. The mode in the research study will be used to examine what the majority of the panel members perceived was the level of the competency or pre requisite statement.

### ***The Range***

The range in a sample is the highest score minus the lowest score in a given distribution (Polit & Hungler 1995, p. 383). This measurement is the simplest measurement of dispersion and is highly unstable (Polit & Hungler 1995, p. 383; Burns & Grove 1993, p. 476). The range will highlight the width and depth of the panel member's different points of view on the competency and pre requisite statements.

### ***The Standard Deviation***

The standard deviation is the most frequently used measure of variance and provides ‘a measure of the average deviation of a score from the mean in that particular sample (Burns & Grove 1993, p. 477; LoBiondo-Wood & Haber 1994, p. 398).’ Because the standard deviation is the average deviation of a score from the mean, it should always be reported with the mean (LoBiondo-Wood & Haber 1994, p. 398). The standard deviation will be used to verify the means of all competency and pre-requisites statements in the study, because of its unique functions as mentioned above. The standard deviation also takes all scores into account and can be used to interpret individual scores (LoBiondo-Wood & Haber 1994, p. 398). Therefore it will be used in the study to interpret individual scores.

### ***3.17 Conclusion***

The components of planning a research study as explained and discussed in the previous chapter were part of a study designed to investigate the perceived role of the CNE in NSW. Research design and an overview of stage 1 of the research study was discussed in-depth. The Delphi technique was introduced and explained. The advantages, limitations and use of the Delphi was discussed. The creation of domains of practice was outlined with reference to literature and the review of job advertisements and job descriptions. Section five of the chapter outlined the questionnaire design of the CNE research study. The questionnaires were used for two rounds of the Delphi and for one survey round. The Likert scale was also analysed, as this was a tool used in the Delphi rounds and the survey.

The main principles of ethical research were discussed and explained in relation to the CNE study. Due to the nature of the CNE study, ethical considerations were minor, as the participants were all consenting adults who were required to answer questionnaires and fill out appropriate forms only.

The target population of the study was RNs who were practicing as clinical educators. A non-probability sampling method, that is purposive sampling, was used as the main sampling methodology in the study. Quota sampling, a probability sampling methodology, was also used to ensure equal representation of sub categories of clinical educators in the survey. The study had very few identifiable biases that required control to ensure a fair and ethical research study was conducted.

Validity and reliability are two major components of any research study and were discussed in depth in this chapter. The CNE study is deemed by the researcher to be both valid and reliable. The methods explained and discussed in this chapter were part of a study designed to define the role of the CNE in NSW. The major issues of ethical considerations, validity and reliability were discussed at length in this chapter.

# CHAPTER FOUR

## Data Analysis

### ***4.0 Introduction***

Data analysis is defined by Polit and Hungler (1995, p. 639) as ‘the systematic organisation and synthesis of research data, and the testing of research hypothe using those data.’ This chapter gives a detailed overview of the data analysis of all data collected in the CNE research study. Where appropriate literature has been reviewed such as in the area of statistical tests used.

The chapter is broken down into the following sections:

1. Demographic data – Round 1 & 2;
2. Round One - Delphi Technique;
3. Round Two - Delphi Technique;
  - List of competencies created for the second round
4. Analysis of round two results by domain
5. Pre requisite Data Analysis – Delphi
6. CNE Survey Data
7. Analysis of survey participants demographic results;
8. Survey results by domain;
9. Pre-requisite Data Analysis - Survey
10. Survey data comparison with demographic data and second round Delphi data
11. Survey data analysis by specific sub categories
12. Overall analysis of survey data
13. Comprehensive list of competencies for CNEs
14. Comprehensive list of pre requisites for CNEs.

Section one provides an overview of the demographic data collected from members of the expert panel used for the two Delphi rounds. Analysis of this data is provided. Section two contains a discussion of the data collection and analysis for round one of the Delphi. Section three and four provides an analysis of all data collected in round two of the Delphi. As statistical tests were carried out on the data, graphs and tables are provided to give a pictorial overview of the data collected.



Section five describes the pre requisites that were generated from round one of the Delphi. An analysis of the participants' grading of the pre requisites is explained in this section. Section six gives an overview of the CNE survey. Section seven provides an overview and analysis of the demographic data collected from the survey participants. Section eight and nine provide a detailed report of the data collected from the survey participants. The data includes not only their perception and rankings of the competencies provided but also their rankings of the pre requisites provided to them.

Section ten provides a comparison of data collected from the expert panel and the survey participants. Section eleven describes the results of the sub category populations that were included in the survey. Section twelve is an overall analysis of the survey data. Section thirteen and fourteen are comprehensive list of the competencies and pre requisites generated by this study for CNEs.

#### ***4.1 Demographic Data - Round One & Two***

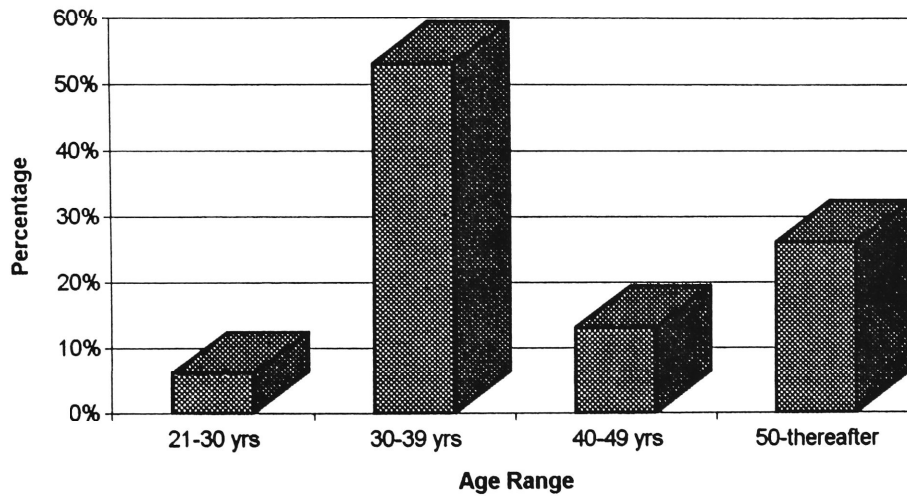
Twenty members were selected to constitute an expert panel. The members of the panel came from various sub specialities of the nursing profession. The panel members were given 14 days to complete the first round booklet and return it in the provided stamped self-addressed envelope. If the booklet had not been returned by the due date, then a reminder post card was sent. If the booklet was still not returned, a follow up phone call was made. Fifteen members of the panel returned the first round booklet, yielding a 75% response rate. The analysed results of the 1st round are broken down into the demographic data analysis and the analysis of the main body of the 1st round. The demographic results of the expert panel are discussed under each separate question. The results of the main body of the first round are broken down into domains.

The following demographic questions were asked of the panel members to ascertain bias that could occur due to the demographic breakdown of the panel.

##### ***Age of Panel Members***

Figure 4.0 demonstrates the range of age of the panel members in years. The age range commenced at 21 due to the fact that all members of the panel must be RNs and hence would not be younger than 21.

**Figure 4:0 Age of panel members**



**KEY:**

- 21-30 years
- 30-39 years
- 40-49 years
- 50 thereafter

An unexpected result of this question was that the majority, 53%, of the panel members were in the 30 - 39 year age range. The researcher believed prior to the research that the experts would be older than this, due to their experience and qualifications. The lower age range however may reflect the trend of nurses moving into specialist management and education positions earlier. The researcher perceives that the differences in age would have no bearing on the panel, as over 90% were older than thirty years of age and only one member was younger than thirty.

***Gender of Panel Members***

Members of the panel were requested to state their gender. This question was asked to ascertain bias based on gender of the panel member. Table 4.0 outlines the gender breakdown of the panel members.

**Table 4.0**      **Gender of expert panel members (N = 15)**

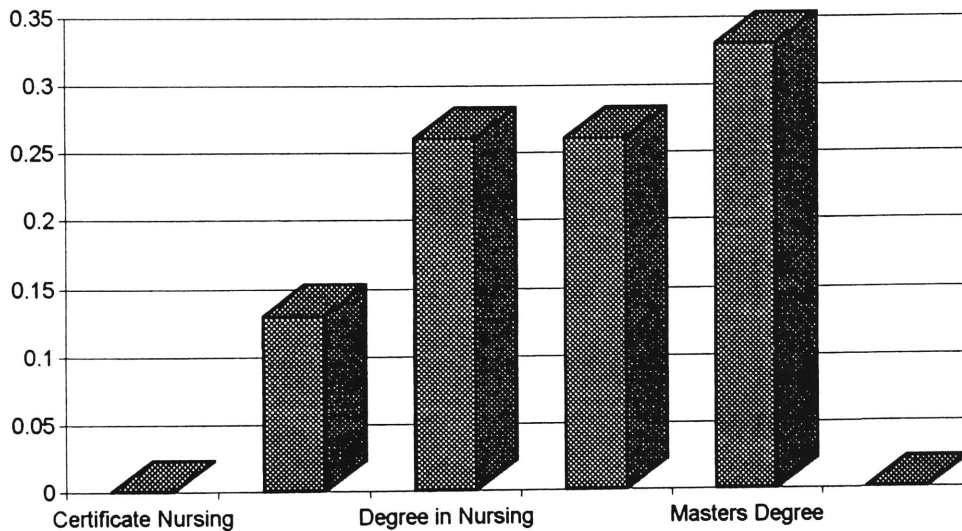
GENDER	AMOUNT	PERCENTAGE
Male	2	13%
Female	13	87%
<b>TOTAL</b>	<b>15</b>	<b>100%</b>

Females represented 87% of the panel members. This result was not surprising as it reflects the current gender profile of the nursing profession. Gender was not perceived by the researcher as having any bearing on the panel responses.

### ***Highest Nursing Qualification***

Figure 4.1 provides a depiction of the qualifications possessed by the panel members.

**Figure 4:1**      **Highest nursing qualification of expert panel members**  
**N =15**



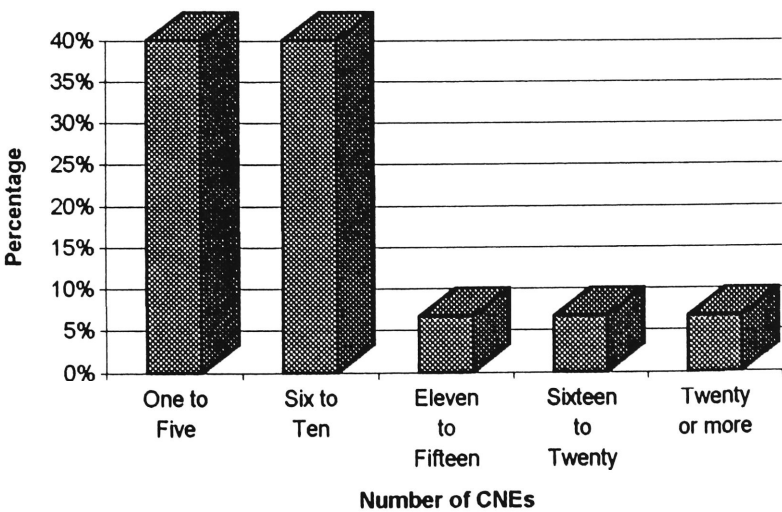
The results indicate that 33% possessed a Masters Degree. This was not surprising as this group had been selected on the basis of their expert status, and the group included academics and managers who could be expected, by virtue of their positions, to have obtained a higher degree.

An unexpected result was that two people (13%) had a non-nursing degree as their highest qualification and that no member had a PhD. This lack of qualification was extremely interesting as the expert panel included two members of nursing academia, who are often required to have this qualification to teach in the university sector.

*Number of CNEs In Contact With on a Regular Basis*

This demographic question was asked to ascertain how many clinical educators the experts were in regular contact with to ascertain if the amount of contact with CNEs influence the panel members’ perceptions of skills required to fulfill the position. The following ranges were provided. 1-5 clinical educators; 6-10 clinical educators; 11-15 clinical educators; 16-20 clinical educators; 20 or more clinical educators. Figure 4.3 demonstrate the level of contact that the members of the panel had with CNEs. The majority of the panel came into contact with either 1-5 clinical educators or 6-10 clinical educators, 40% in each range on a regular basis. Regular contact was defined as having contact with a CNE more than once a week and working with CNEs on committees and on various projects

**Figure 4:2      Number of CNEs in contact with regularly**  
**N = 15**



This result was not surprising as this was a prerequisite for inclusion on the panel.

### ***Overview of Demographic Data***

The demographic data of the expert panel contained significant data. The majority of the expert panel could be described as well-educated female RNs who were over thirty and who were in regular contact with CNEs. The group had been chosen on the basis of their perceived expert status and their demographic data supports this assertion.

The group was well educated with no member possessing a qualification lower than a degree as their highest nursing qualification, and five members of the panel retaining a masters degree as their highest qualification. However, it is noted that, no member of the group had a Ph.D. This could not be controlled as the group members were selected by their work position not their qualifications. The group may have had other qualifications, which were non-nursing, but they were not requested to state on this form. The group had regular contact with CNEs as part of their inclusion criteria, and it was found that 58% actually had regular contact with more than five CNEs.

### ***4.2 Round One – Delphi Technique***

The first round of the Delphi gained a 75% response rate, which is a significant response rate. All 15 members who did respond filled in the booklets correctly and with numerous comments. All booklets were returned with consent forms signed and demographic forms completed. The first round required a moderate amount of work to be done by the panel members, with written comments required. This may explain why a small number of members did not respond to the 1st round.

The participants were required to write the competencies or skills, which they perceived were necessary for a CNE to possess in order to undertake their role. Panel members were given five domains that had been created from the analysis of literature and job descriptions on clinical educators. The domains were: clinical; education; management; interpersonal; professional. The panel members generated three hundred and seventy nine (379) comments. The comments were generally written under the five domains provided, although a small majority of the panel members did comment on the overall research project. Members of the panel were informed that content analysis was to be carried out on all the comments written. One extra domain was created in the analysis due to the large magnitude of comments pertaining too reflective practice and research based practice.

While research practice underlines all domains, the large percentage of comments, qualifies it to be a separate domain. Especially as the skills listed, involved complex items such as conducting nursing research.

Comments were also found in the wrong domain. For example, educational comments were found in the clinical domain or the interpersonal domain. This may be due to the difficulty in separating certain expected qualities and skills such as role modeling, which appeared in the majority of the domains. Two comments from panel members alluded to this, as they stated they found separating competencies/skills quite difficult.

The majority of comments were lists of skills required by a CNE to fulfill their position. Only a small percentage of panel members used competency language. This was not an expected phenomenon as competencies are not a new concept to a majority of people, but despite this a large percentage of nurses still think in terms of skills. However, the researcher believed that the experts of the profession would have a greater understanding of competencies and would be familiar with the competency language.

All comments were analysed using content analysis and coding for recurring themes. A theme was generated out of the comments, if the comment was made by more than two panel members. The theme then became a competency statement in the 2nd round of the Delphi and the comments made by the panel members became the elements of that competency statement. The comments from the panel members and themes generated are discussed under each domain heading.

### ***Clinical Domain***

Seventy-one (71) comments were written in this domain. Five major themes were generated out of these comments. Years of clinical experience was a recurring theme. It was therefore decided because of this and because of the large number of comments generated in the education domain about the required qualifications of a CNE that a list of pre requisites would be issued in the 2nd Delphi round. Figures presented overpage are the number of responses that fit into each particular them of practice. Percentages are included to indicate the proportion of the total responses that pertain to each of them.

The major themes that arose in this clinical domain were:

- Clinical expertise 32% 22

• Knowledge of hospital policies and procedures	13%	10
• Role modeling	32%	22
• Knowledge and use of technology	7%	6
• Knowledge of nursing.	15%	11
	<b>100%</b>	<b>71</b>

It was clear in this domain that the panel members believed that the CNE should be a clinical expert and a clinical role model to other members of staff. This issue fits in well with the NSW State Award (1995). However problems arise when a CNE is employed for a target group such as TENs and is required to work across many clinical areas, yet is still required to be a clinical expert. This is difficult to reconcile because of the specialisation of nursing and the different requirements of each speciality within a hospital.

Role modeling was also a major theme within this and in other domains. The skill of role modeling was not explained or described fully, however the perception was that the CNE would be a positive role model to other members of staff. This perception was ascertained by the positive comments regarding role modeling, such as the 'CNE must be clinical leader and guide to junior staff.'

Within this domain there was also a significant number of comments regarding quantity of clinical experience a RN should have prior to becoming a CNE (five comments). Different panel members gave different quantities of time, and certain panel members did not mention a time frame but clearly stated that the CNE should have good clinical grounding before moving into the role.

Other comments in this section included:

- 'the word deep and all is hard to quantify' (in relation to knowledge and/or ability);
- 'all practice should be research based';
- 'must be an expert clinician in selected area';
- 'be able to problem solve';
- 'be innovative in patient care, use nursing research as a basis for practice';

### ***Educational Domain***

This domain produced eighty-five (85) different comments, and was the largest domain of practice. Comments regarding education were also found in all of the different domains.

It was evident that the panel members clearly believed that the CNE role was an educational role. The 14 themes generated out of the comments in this domain were:

• Understanding of adult education	10%	10
• Assessment of staff	12%	12
• Identify skill deficits	9%	8
• Plan educational programs and strategies	7%	6
• Develop and implement educational programs and strategies	7%	6
• Evaluate educational programs and strategies	6%	5
• Use a variety of different teaching methods as required	7%	6
• Provide feedback	6%	5
• Able to teach in the clinical area	8%	7
• Able to teach outside the clinical area	11%	9
• Link theory and practice	4%	2
• Knowledge of educational opportunities	4%	2
• Innovative educational ideas	3%	2
• Motivates staff to learn.	6%	5
	<b>100%</b>	<b>85</b>

The major themes in this domain centered on the CNE being a competent educator, who was able to educate in the clinical arena as well as in the classroom. The ability to teach in a classroom contradicts the 1995 NSW state award, which clearly states that the CNE should teach only in the clinical area. The other major themes in this domain were the preparatory work an educator must undertake prior to engaging in effective teaching, such as, the identification of skill deficits and planning of educational strategies. Evaluation and the provision of feedback also featured highly in this domain.

Comments regarding the ability to link theory to practice also featured in this section. This may have been due to the perceived theory-practice gap that occurred with the movement of nurse education into the tertiary sector, and the perceived role of CNEs in assisting new graduate RNs in bridging this gap.



This domain included comments regarding the CNE acting in a career adviser role, 3%.

Comments included the requirement of the CNE to have knowledge of outside educational courses and how to access different institutions. This was an unexpected comment as hospitals or Area Health Services often have a career adviser as does the Department of Health and the NSW Nurses Association.

The required qualifications of a CNE were discussed within this domain. It was clear that the panel members did not believe that a CNE could fulfill this position adequately without some form of higher education pertaining to adult education. It was not clear what type of education, tertiary or non tertiary, this was expected to be.

Other comments for this section included:

- ‘ability to motivate staff to learn’;
- ‘innovative approach to education to maintain interest’;
- ‘ability to formulate / update orientation and learning packages for the ward’;
- ‘familiar with educational opportunities within and external to the organisation’;
- ‘Professional updating – maintains clinical credibility’.

### ***Managerial Domain***

This domain produced sixty-three (63) different comments. Only six themes were generated out of the comments in this domain, due to the majority of comments from the panel member being of a similar nature. The themes generated included:

• Planning and prioritisation	22%	14
• Time management	15%	10
• Uses resources effectively	29%	18
• Organisational Skills	13%	8
• Maintains records	8%	5
• Member of committees/bodies.	13%	8
	<b>100%</b>	<b>63</b>

Comments in this domain included, that the CNE was not a manager and hence required no management skills or competencies. However other panel members did perceive, as can be seen by the above comments, that the CNE was required to manage and did require management competencies.

Major competencies included the ability to be organised, good time management skills and the ability to plan and prioritise. This is easily explained as the CNE is required to orient new staff, who may have difficulty in time management and planning and prioritisation. Organisation is often considered a generic skill required by all nurses, if not by all workers.

The management of resources by the CNE was commented on by the panel members. Comments included the management of financial resources as well as human resources such as consulting expert nursing consultants when required. Financial resources required by the CNE included knowledge of the ward budget and careful expenditure.

Other comments for this section included:

- ‘substitute appropriate for the word right (resources)’;
- ‘budgetary allocating is not a priority for a CNE’;
- ‘participate in performance appraisals’;
- ‘ability to deal with failure of assessment’;
- ‘ability to liaise effectively with higher echelons’;
- ‘ability to set priorities and time manage’

### ***Interpersonal Domain***

This domain produced seventy-four (74) comments. A large amount of educational comments were found in this domain as well as professional comments. Five major themes were generated from the data. The themes were:

• Effective and appropriate communication skills	44%	31
• Team member	11%	8
• Empathetic and approachable	14%	11
• Conflict resolution ability	13%	10
• Counselling skills.	18%	14
	<b>100%</b>	<b>74</b>

This domain contained many expected competencies such as communication skills, but it also contained many unusual items such as the CNE possessing a polite and calm manner. It is interesting to note that effective and appropriate communication skills had 44% of the comments in this area. This demonstrates that a large percentage of panel members believed that this competency was necessary for a CNE to possess.

Communication and counselling skills were recurrent themes within this domain along with conflict resolution skills. These themes would be expected of any individual in an education role. The ability to be empathetic and approachable was also mentioned by the panel members. The theme was generated out of comments such as the ability to be empathetic towards a learner as well as non-judgmental and approachable regarding learning needs. The ability to work as a team member also rated highly by the panel member. The literature however clearly states that clinical educators often do not feel part of a team as they are in a no person's land caught between education and the clinical area. It is also difficult to ascertain what team a clinical educator would belong to, if they are employed to work with a specific group as they often need to relate to all clinical areas as well as to the educational department of a health facility.

The main difficulty raised by members of the panel with this domain is how these often subjective competencies could be measured objectively.

Other comments included in this section were:

- 'most important area for a CNE';
- 'all highly desirable skills in any professional nurse';
- 'open door policy';
- 'ability to empower staff member to learn';
- 'ability to be culturally sensitive'

### ***Professional Domain***

This domain of practice attracted the smallest amount of comments out of all the domains, with only sixty-two (62) comments generated. Despite having the smallest amount of comments of all the domains, seven different themes were generated. The themes generated were:

• Maintains and updates own professional knowledge/development	32%	21
• Commitment to the profession	13%	9
• Has a professional attitude	13%	9
• Professional role model to others	18%	11
• Knowledge of the Australian Health Care system	5%	4
• Confident manner and speech	5%	4
• Physical appearance.	5%	4
	<b>100%</b>	<b>62</b>

Themes that were unexpected were themes such as, confident manner and speech and correct physical appearance. While the researcher did not believe that these characteristics were competency statements or even skills, because more than two panel members mentioned them, they were included in the 2<sup>nd</sup> round. The items regarding manner and dress were unexpected and interesting to note as the researcher does not believe that they are competencies and do not have any place in a formal document regarding the requirements of a CNE.

Themes such as maintains and updates own professional knowledge and development, and has a professional attitude were expected. An unexpected point was that certain panel members believed that not only should the clinical educator maintain and update their own professional knowledge, they should encourage others to be professional. CNEs could do this by being a professional role model and displaying a commitment to the profession through membership of professional groups.

Knowledge about the NSW and Australian Health care system was also mentioned more than twice in the 1st round. The panel members perceived that the clinical educator is expected to be an informed and active member of the health care team.

### ***Reflective Practice Domain***

This domain was created out of comments that were located in all other domains. Comments relating to research were frequent and occurred in all domains, especially the domains of education and clinical practice. Percentages are not used in this domain as comments were found in different domains due to this domain not being created in the first round. Four major themes were generated, which were:

• Reflective practice	3
• Knowledge of nursing research	5
• Uses research based practice	3
• Conducts research.	4
	15

While it is noted that reflective practice should underpin all actions of a nurse and an educator, research and specialised reflective practice were commented on significantly in the 1st round. Comments regarding the acquisition of specialised research skills were frequent, but usually as part of another comment such as, ‘delivers research based education programs.’

The main comments in this theme pertained the ability of an educator to be reflective and to have a broad and expansive knowledge of nursing and educational research. The educator was also expected, as are all nurses, to engage in reflective practice and to utilise research based practice. It was also commented that the clinical educator should drive or conduct research into areas of nursing expertise.

### *Comments not included in the Second Delphi Round*

A small number of comments were not included in the second round, due to only being mentioned by one panel member. These comments were not used to create competency statements. These comments stood out for the fact that they were mentioned in isolation and were not part of any recurring theme. These comments were part of the 379 comments generated by the expert panel members and include:

- Adequate time for teaching;
- Conducts health promotion;
- Full understanding of all staff positions;
- Provides clinical support;
- Ability to maintain clients safety whilst trainee performs a new skill;
- Computer skills;
- Liaison and coordination of the staff for presentation;
- Demonstrates a problem solving approach to managing crisis;
- Knowledge of occupational health and safety guidelines;
- Establish managerial commitment to education.

Other comments were also mentioned in the domains and not mentioned above due to being unreadable or non-comprehensible. While it is acknowledged that the above mentioned comments should not be part of a competencies list, the majority are not skills or learnt competencies rather, they are part of a working or job function list. A small percentage of the items mentioned above are also out of the CNEs' hands. It is perceived that a CNE would have little control over management commitment to education, or even the allocation of time for teaching.

Health promotion and an understanding of all staff positions could be considered to part of any RNs role, and appears in the ANCI beginning practitioner's competency statements. Knowledge of Occupation Health and Safety guidelines was mentioned once only. Once again it can be expected that all RNs would possess this knowledge.

Providing clinical support is interesting, as this is one main item that anecdotal evidence states causes conflict and friction for the clinical educator. It was anticipated that this item would be mentioned more frequently as anecdotally it appears to occur often. However the 1995 NSW State Award is clear that the role is that of a clinician not an educator.

The ability to maintain client safety whilst the trainee performs a new skill is an interesting item. The law is clear that all RNs are accountable for their own actions, however educators and managers are also responsible for ensuring that client safety is paramount. In the age of burgeoning technology, it is surprising that computer skills was only mentioned once. Anecdotal evidence points to the fact that clinical educators teach outside the clinical area and hence require audio visual aids and extensive notes and handouts which today are often computer generated. The generation of reports and report keeping were mentioned more than twice, which one would assume would require computer skills, yet these skills were mentioned only once. Liaison and coordination of staff for presentations was mentioned only once as an adjunct to providing an inservice calendar. Demonstrates a problem solving approach to managing crisis was also only mentioned once, however it was not clear what sort of crisis the panel member meant!

Establish managerial commitment to education was an interesting comment. It was not clear how the clinical educator was to go about doing this, or even why it was needed. Any successful education department of course needs managerial commitment to education. However the role that a CNE could play in obtaining this support is not clear.

### ***Overall Analysis of the First Delphi Round***

The 1st round of the Delphi provided very rich and descriptive data about the competencies that a CNE needs to fulfill their position as perceived by members of the expert panel. A 75% response rate was obtained from this first round, with 379 comments generated by the panel members. The panel members were required to perform a moderate amount of work in this round, by the virtue of the fact that they were required to hand write sets of competencies/skills.

The members of the panel were given five separate domains of practice and gave the following breakdown of comments: Clinical Domain - 71 comments; Education Domain - 85 comments; Managerial Domain - 63 comments; Interpersonal Domain - 74 comments and Professional Domain - 62 comments.

One new domain, Reflective Practice, was created out of the data. This new domain had 14 separate comments scattered throughout the other domains. A list of pre requisites was also generated from the data, comprised of educational qualifications and clinical experience, considered necessary for a CNE. Ten comments were not included in the next round, as there were only mentioned once, or because they were unreadable or incomprehensible.

Forty-one competencies were generated out of this data. Clinical domain - 5 competencies; education domain - 14 competencies; management domain 6 - competencies; interpersonal domain - 5 competencies; professional domain - 7 competencies and reflective practice domain - 4 competencies. The statements came from the recurring themes that emerged from the data. Certain competencies were not true competencies, such as correct personal grooming, however as stated previously, if the item was mentioned more than twice it was made into a competency for inclusion in the next round. Other competencies were slightly repetitive and could have been compressed into others. However the researcher considered that if a comment was mentioned more than twice an appropriate competency statement would be constructed and sent out in the second round.

A percentage of the competencies were similar to those of the ANCI competencies for beginning RNs. These competencies included those of reflective practice and interpersonal skills. The ANCI competencies have now been in use for more than five years, so it was expected that people may use them as a basis for creating these competencies. Nevertheless it was hoped that the study participants would use the competencies as a beginning basis only and look at the more advanced practice required by the CNE.

### ***4.3 Round Two - Delphi Technique***

Round two of the Delphi was sent out approximately four weeks after round one booklets were received. The second Delphi round was only sent to the 15 members of the expert panel who had responded to the first round. This measure was decided on, because it was perceived that the five non-respondents of the first round would not be able to respond informatively to the second round due to their lack of involvement in the first round.

The second Delphi round required the panel members to circle the rating scale of each competency statement, and there was room for comments. Hence the workload of the second round was lighter than the first round. There were 41 competencies included in the second round.

Each competency statement comprised of a major competency statement with one verbal description underneath it to describe what the competency statement meant. Below the verbal description there was two to three elements which indicated how the competency statement could be demonstrated in the workplace. The elements were taken straight from the comments provided by the panel members in the first round.

An example of a complete competency statement used is demonstrated below:

**COMPETENCY 1: Demonstrates and maintains clinical expertise**

**Verbal Description:** Demonstrates a broad understanding of all aspects of clinical nursing care

**Elements:**

- A) Respected by peers within the clinical area to be clinically credible
- B) Delivers a high standard of nursing care
- C) Has an accurate and comprehensive knowledge of the area in which they are educating

The second round was presented again in a booklet form with a return by date and stamped self-addressed envelope enclosed for an easy return. No consent forms or demographic forms were enclosed due to this data being collected in the first round. The response rate for the second booklet was 93%, with 14 members of the panel responding. This may have been due in part to being a second round and hence the panel members had perceived ownership of the data and or due in part to the lighter workload required of the participants.

In the second round the participants were required to examine each competency statement and to rank them in levels of significance to the role of the CNE. The rating scale used was a Likert scale with five variables, ranging from Irrelevant to Essential. A middle variable was added to the Likert scale as the researcher considered that by including the middle scale in there might cause less resistance by the panel members. It was also perceived that as the panel members were experts in their field they would be able to make an assumption regarding competencies for members of their profession.



The variables used in the scale were:

1.     **IRR**    **Irrelevant to the role of CNE**, This competency is not what is required of a CNE
2.     **NE**     **Not essential**, This competency is not essential for a CNE
3.     **D**       **Desirable**, This competency is desirable, but not essential
4.     **HD**    **Highly Desirable**, This competency is highly desirable, but not essential
5.     **ESS**    **Essential**, This competency is essential for a CNE

At the end of each domain there was area for comments. After the 41 competency statements a list of educational and clinical pre-requisites was presented. The panel members were required to also rate the seventeen pre-requisites in the same format that they had rated the competency statements. As mentioned previously the list of pre-requisites was generated from comments given by the panel members in the first round in the clinical and educational areas.

#### ***4.3.1 List of Competencies Created for the Second Round***

Below is the list of competencies generated for the second round:

##### **Clinical Domain**

1.     Demonstrates and maintains clinical expertise
2.     Demonstrates an accurate and comprehensive knowledge of nursing policies, practices and standards, particular to the area in which they are educating
3.     Demonstrates role model / mentor characteristics
4.     Maintains a high level of technological skill and understanding
5.     Demonstrates a wide and comprehensive knowledge of nursing care

##### **Educational Domain**

6.     Demonstrates knowledge of adult learning principles
7.     Applies educational strategies to assess individuals and groups
8.     Identifies skills deficits within a clinical area
9.     Formulates plans for educational programs within the clinical area
10.    Develops, and implements planned educational programs (informal and formal)
11.    Evaluates effectiveness of educational strategies and implements changes as required
12.    Utilises a variety of teaching methods as required
13.    Provides effective and constructive feedback to learners, peers and other stakeholders
14.    Engages effectively in clinical teaching
15.    Educates at an appropriate level, with a high degree of skill

16. Demonstrates the ability to link theory with practice
17. Possesses knowledge of educational opportunities within, and external to the organisation
18. Responsive to new and innovative ideas
19. Enhances the motivation of staff to learn

#### **Management Domain**

20. Effectively plans and prioritises education
21. Utilises time effectively and efficiently
22. Utilise resources effectively and efficiently
23. Demonstrates effective organisation skills
24. Maintains accurate records and documentation
25. Actively participates in relevant committees

#### **Interpersonal Domain**

26. Communicates effectively and appropriately
27. Establishes, and maintains collaborative relationships with all members of the health care team
28. Establishes and maintains an approachable and empathic relationship with all staff members
29. Demonstrates ability to manage and resolve conflict
30. Utilises effective counselling strategies to assist colleagues

#### **Professional Domain**

31. Maintains and updates personal professional development
32. Demonstrates commitment to professional organisations
33. Demonstrates a professional attitude
34. Actively encourages and promotes the professional development of other staff members
35. Demonstrates an understanding of the structure and function of the Health Care System
36. Displays a confident manner and clear speech
37. Ensures that physical appearance is appropriate when at work

#### **Reflective Practice Domain**

38. Engages in reflective practice
39. Demonstrates knowledge of nursing research
40. Incorporates research into practice

41. Conducts and contributes to nursing research

#### ***4.4 Analysis of Round Two Results by Domains***

The statistical tests carried out on each competency statement within their domains, and a general discussion of the results are demonstrated below. The means of each competency statement are discussed at length due to the mean being an average of all the scores. The tables display all statistical tests carried out, however the figures display only the means. A general overview of the scores is shown in the final result section.

#### **Clinical Domain**

A combination of the scores given by each panel member for the competency statements in the clinical domain are displayed in Table 4.1.

**Table 4:1 Clinical Domain Results**

COMPETENCY	MEAN	MEDIUM	MODE	RANGE	STANDARD DEVIATION
1	4.92	5	5	4-5	0.27
2	4.71	5	5	4-5	0.61
3	4.92	5	5	4-5	0.27
4	4.28	5	5	2-5	0.91
5	4.57	5	5	3-5	0.63

#### **KEY**

- 1 Demonstrates and maintains clinical expertise
- 2 Demonstrates an accurate and comprehensive knowledge of nursing policies, practices and standards, particular to the area in which they are educating
- 3 Demonstrates role model / mentor characteristics
- 4 Maintains a high level of technological skill and understanding
- 5 Demonstrates a wide and comprehensive knowledge of nursing care

#### **Comments Regarding the Clinical Domain**

##### ***The Mean***

As can be seen by the above table all five competency statements in the clinical domain rated means of above four, desirable.

Only one competency statement scored a mean below 4.5, which was competency statement 4, *maintains a high level of technological skill and understanding*. 50% of panel members perceived that this competency was not essential for a CNE to possess, however 78% perceived that the competency was essential or highly desirable to the role of the CNE.

### ***The Medium***

All mediums in the clinical domain were five. This demonstrates that 100% of panel members ranked the competency statements five, or essential.

### ***The Mode***

All modes in the clinical domain were five. This demonstrates that 100% of panel members ranked the competency five (essential) to all five competency statements in the clinical domain.

### ***The Range***

The ranges were slightly different for each competency statements. Two competencies had ranges from four to five, competency number 1, *demonstrates and maintains clinical expertise*, and 3, *demonstrates role model/mentor characteristics*. This demonstrates that there was a consensus among the expert panel in the view that competencies 1 and 3 were highly desirable or essential. Competency 4, *maintains a high level of technological skill and understanding*, scored a range of two to five, while competency 2, *demonstrates an accurate and comprehensive knowledge of nursing policies, practices and standards, particular to the area in which they are educating*, and 5 *demonstrates a wide and comprehensive knowledge of nursing care*, scored ranges from three to five. This demonstrates that at least one person perceived competency statements 2, 4 and 5 as only being desirable to the role. The diverse ranges also demonstrate that despite one person perceiving the statement to be either, not essential or desirable, other members of the panel perceived the statement to be essential to the role.

### ***The Standard Deviation***

The standard deviations of the 5 competencies illustrate that there is little variance from the mean of each competency statement. Competency statement 4, *maintains a high level of technological skill and understanding*, shows the highest deviation with a SD of 0.91.

### **Overall**

The competency statements within this domain had a high level of consensus by panel members. The means demonstrates that all the panel members (100%) perceived that the five competency statements in this domain were either highly desirable or essential to the role of the CNE.

### **Educational Domain**

A combination of the scores given by each panel member for the competency statements in the education domain are displayed in Table 4.2. Table 4.2 displays all statistical tests carried out on the competencies in the education domain.

**Table 4:2 Educational Domain Results**

COMPETENCY	MEAN	MEDIUM	MODE	RANGE	STANDARD DEVIATION
6	4.42	4	5	3-5	0.73
7	4.28	5	5	3-5	0.74
8	4.57	5	5	4-5	0.51
9	4.5	5	5	3-5	0.65
10	4.35	4	4	3-5	0.63
11	4.21	4	4	3-5	0.73
12	4.42	5	5	3-5	0.76
13	4.57	5	5	4-5	0.51
14	4.85	5	5	4-5	0.42
15	4.28	4	5	3-5	0.73
16	4.57	5	5	2-5	0.93
17	3.85	4	4	3-5	0.83
18	4.28	4	5	3-5	0.72
19	4.42	4	5	3-5	0.63

### **KEY**

- 6 Demonstrates knowledge of adult learning principles
- 7 Applies educational strategies to assess individual and groups
- 8 Identifies skill deficits within a clinical area
- 9 Formulates plans for educational programs within the clinical area
- 10 Develops, and implements planned educational programs (informal & formal)

- 11 Evaluates effectiveness of educational strategies and implements changes as required
- 12 Utilises a variety of teaching methods as required
- 13 Provides effective and constructive feedback to learners, peers and other stakeholders
- 14 Engages effectively in clinical teaching
- 15 Educates at an appropriate level, with a high degree of skill
- 16 Demonstrates the ability to link theory with practice
- 17 Possesses knowledge of educational opportunities within, and external to the organisation
- 18 Responsive to new and innovative ideas
- 19 Enhances the motivation of staff to learn

### **Comments Regarding the Education Domain**

#### ***The Mean***

The educational domain contained the largest number of competencies, with 14 statements in total. Thirteen of these statements (93%) scored means above four (highly desirable). Only one competency (7%), number 17 *possesses knowledge of educational opportunities within, and external to the organisation*, scored a mean below highly desirable, with a mean of 3.85. This competency could therefore not be included in the survey.

#### ***The Medium***

The mediums in this domain were from four to five. This illustrates that the panel members perceived that the competencies were either highly desirable or essential to the role of the CNE.

#### ***The Mode***

The modes of the competencies in this domain were either four or five, with five being the major mode (78%). This demonstrates that the consensus among the panel members was that the competency statements were either highly desirable or essential.

#### ***The Range***

The range of the competency statements was varied with 93% being three to five. This illustrates that all panel members scored the competencies from desirable to essential. One competency statement (7%) scored a very wide range of two to five, which demonstrates that different members of the expert panel had very different ideas regarding the significance of this competency statement to the role of the CNE. This was competency 16 *demonstrates the ability to link theory with practice*.

This is often perceived by educators as being an essential component of education, assisting staff to link theory obtained at undergraduate and postgraduate level with day to day practice.

### *The Standard Deviation*

The standard deviations of each competency statement show little variance from the mean, highlighting consensus among panel members. The highest variation was competency statement number 16, *demonstrates the ability to link theory with practice*, with a SD of 0.93.

### *Overall*

Overall the competency statements within this domain scored high means by the panel members with 93% above 4 or highly desirable, thus demonstrating that education ability and education knowledge are the perceived corner stones of this role.

## **Managerial Domain**

A combination of the scores given by each panel member for the competency statements in the Managerial domain are displayed in Table 4.3.

**Table 4:3      Managerial Domain Results**

COMPETENCY	MEAN	MEDIUM	MODE	RANGE	STANDARD DEVIATION
20	4.5	5	5	4-5	0.51
21	4.71	5	5	4-5	0.49
22	4.28	4	4	3-5	0.61
23	4.42	5	5	3-5	0.65
24	4.42	5	5	3-5	0.82
25	4	4	4	3-5	0.66

### **KEY**

- 20**      Effectively plans and priorities education
- 21**      Utilises time effectively and efficiently
- 22**      Utilises resources effectively and efficiently
- 23**      Demonstrates effective organisation skills
- 24**      Maintains accurate records and documentation
- 25**      Actively participates in relevant committees

## **Comments Regarding the Managerial Domain**

### ***The Mean***

All six competencies in the management domain scored a mean of above four (highly desirable). This illustrates that all the panel members regarded all six competencies as being highly desirable or essential to the role of the CNE.

### ***The Medium***

The mediums of the six competencies in this domain ranged from four to five. This demonstrates that the majority (100%) of rankings given by the panel members were in the range of four to five.

### ***The Mode***

Four competencies, or 66% of the competencies, scored modes of five, with two competencies or 44% receiving a mode of four. This demonstrates that all panel members ranked the competencies as either highly desirable or essential.

### ***The Range***

The range of the six competencies scores were, either three to five, 66% of them or four to five, 44% or two competencies. This demonstrates that panel members perceived these competencies as ranging from desirable too essential. No panel member thought the competencies were less than desirable.

### ***The Standard Deviation***

The standard deviations in this domain demonstrated little variance from the mean.

### ***Overall***

Overall the tests carried out on the results of this domain demonstrated that the majority of the panel members perceived that the competencies were either highly desirable or essential to the role of the CNE.

## **Interpersonal Domain**

A combination of the scores given by each panel member for the competency statements in the interpersonal domain are displayed in Table 4.4.



**Table 4:4 Interpersonal Domain Results**

COMPETENCY	MEAN	MEDIUM	MODE	RANGE	STANDARD DEVIATION
26	4.28	5	5	4-5	0.51
27	4.42	5	5	3-5	0.75
28	4.5	5	5	3-5	0.65
29	4.28	4	5	3-5	0.72
30	3.92	4	4	3-5	0.73

**KEY**

- 26** Communicates effectively and appropriately
- 27** Establishes and maintains collaborative relationships with all members of the health care team
- 28** Establishes and maintains an approachable and empathic relationship with all staff members
- 29** Demonstrates ability to manage and resolve conflict
- 30** Utilises effective counselling strategies to assist colleagues

**Comments Regarding the Interpersonal Domain**

***The Mean***

Four of the competency statements, or 83%, in this domain scored a mean of four or higher, demonstrating that the majority of the panel members perceived that the competencies were either highly desirable or essential. One competency or 17%, competency 30, *utilises effective counselling strategies to assist colleagues*, scored a mean below four (highly desirable), with a score of 3.92 (Desirable).

***The Medium***

The mediums in this domain ranged from four to five, with 60% being five.

***The Mode***

Eighty percent of the modes in this domain were five, with one competency statement or 20% being four, competency 29, *demonstrates ability to manage and resolve conflict*. This demonstrates that the majority of panel members perceived that the competencies in this domain were either highly desirable or essential to the role.

### ***The Range***

The ranges in this domain were either three to five, 80% or four to five, 20%. This demonstrates that the panel member's perceptions of significance ranged from desirable to essential. No panel member believed that any competency statement in this domain was less than desirable.

### ***The Standard Deviation***

The standard deviations in this domain showed little variance from the mean, demonstrating that the majority of the panel members were in consensus.

### ***Overall***

Overall the competencies in this domain were rated as highly desirable or essential with only one competency statement receiving a score of less than highly desirable, competency 20, *demonstrates ability to manage and resolve conflict*. The majority of panel members were in consensus with their scores.

## **Professional Domain**

A combination of the scores given by each panel member for the competency statements in the professional domain are displayed in Table 4.5.

**Table 4:5 Professional Domain Results**

COMPETENCY	MEAN	MEDIUM	MODE	RANGE	STANDARD DEVIATION
31	4.5	5	5	4-5	0.51
32	4.07	4	4	2-5	0.80
33	4.78	5	5	3-5	0.75
34	4.14	4	5	3-5	0.91
35	3.85	4	4	3-5	0.77
36	4.14	4	5	2-5	0.99
37	3.14	4	4	1-5	1.51

### **KEY**

- 31 Maintains and updates professional development
- 32 Demonstrates commitment to professional organizations
- 33 Demonstrates a professional attitude

- 34 Actively encourages and promotes the professional development of other staff members
- 35 Demonstrates an understanding of the structure and function of the health care system
- 36 Displays a confident manner and clear speech
- 37 Ensures that physical appearance is appropriate when at work

### **Comments Regarding the Professional Domain**

#### ***The Mean***

The means in this domain were varied. Five competency statements scored means above four (highly desirable), 71%, with two scoring means above 4.5, 28%. Two competency statements, or 28%, scored means below four with score of 3.85 and 3.14. These two competency statements were number 35, *demonstrates an understanding of the structure and function of the health care system* and 37, *ensures that physical appearance is appropriate when at work*. This was unusual as the majority of competencies, 88%, scored above four with only five competencies or 12% of the competencies scoring below four.

#### ***The Medium***

The mediums of the competencies within this domain range from four to five, with the majority, 71%, being four. This demonstrates that the majority of the scores were within the four or highly desirable range.

#### ***The Mode***

The modes of the competency statements were either four or five, with the majority, 57% being five. This demonstrates that the majority of the panel members believed that the competency statements were either highly desirable or essential to the role.

#### ***The Range***

The ranges were very dispersed for the competency statements within this domain. The ranges were from one to five, 14%; two to five, 14%; three to four, 57% and four to five, 14%.

Competency 37, *ensures that physical appearance is appropriate when at work*, had a range from one to five, which demonstrates that at least one member of the panel perceived that the competency statement was irrelevant to the role and one perceived it was essential. This is the widest range of all the competency statements.

### ***The Standard Deviation***

The standard deviations for the competency statements show that there is variance from the means in the majority of the competency statements. The largest variance occurred in competency 37, *ensures that physical appearance is appropriate when at work*, which also scored the lowest mean.

### ***Overall***

The competency statements within this domain show the largest differences of opinions by the panel members. Competency 37, *ensures that physical appearance is appropriate when at work*, has the lowest mean of all competency statements. Competency 35, *demonstrates an understanding of the structure and function of the health care system*, also scored a very low mean, however both scores were above desirable for the role. The range for the competency statements was also very interesting. Competency 37, *ensures that physical appearance is appropriate when at work*, had the largest range with a score of one to five, this is the largest range also of all the competency statements. Competency 32, *demonstrates commitment to professional organisations*, had a range of two to five but managed to have a mean of 4.07 which is still highly desirable.

## **Reflective Practice Domain**

A combination of the scores given by each panel member for the competency statements in the reflective domain are displayed in Table 4.6.

**Table 4:6 Reflective Practice Domain Results**

COMPETENCY	MEAN	MEDIUM	MODE	RANGE	STANDARD DEVIATION
38	4.35	4	4	4-5	0.50
39	4.14	4	4	3-5	0.77
40	4.35	4	5	3-5	0.80
41	3.57	4	4	3-5	0.85

### **KEY**

- 38 Engages in reflective practice
- 39 Demonstrates knowledge of nursing research
- 40 Incorporates research into practice

### Comments Regarding the Reflective Practice Domain

#### *The Mean*

Three of the competency statements scored means above four number 38,39 and 40, 75%, and one competency statement, number 41, scored a mean of above three (desirable) 25%,. This demonstrates that for three of the competencies the panel members perceived that they were highly desirable.

#### *The Medium*

The mediums of all competencies were four. This illustrates that at least 50% of the scores were above four (highly desirable) for all the competencies in this domain.

#### *The Mode*

Three of the modes of the competency statements were four, 75%, with one competency statement, 25%, being five. This illustrates that the majority of the panel members scored the competency as highly desirable, except for competency 40, where the majority of the panel members scored the competency as essential.

#### *The Range*

The ranges for the competency statements were three to five, 75%, with one competency statement, 25%, Competency 38, *engages in reflective practice*, having a range of four to five. This demonstrates that the panel members believed the competency statement were either desirable (3) or essential (5).

#### *The Standard Deviation*

The standard deviation shows little variance from the mean for all competency statements.

#### *Overall*

The competencies in this domain scored means of highly desirable or desirable. Only one competency scored a mean of desirable, which was competency 41, *conducts and contributes to nursing research*. The ranges, mediums and modes all demonstrated that the majority of the panel was in consensus.

## ***Overall Analysis of the Results of the Second Delphi Round***

The second round of the Delphi was sent out four weeks after the first round was received. The second round was only sent to the fifteen people who had completed the first round. Forty one competencies were given to the panel experts for their consideration along with seventeen pre requisite statements. The panel members were requested to rank each competency statement and each pre-requisite statement as to their significance to the role of the CNE. The range given was from irrelevant to essential to the role. A 93% response rate was obtained in this second round, with fourteen members of the panel returning their booklets.

Descriptive statistics was used to analyse the data received, with the mean, mode, medium, range and standard deviation being applied to each result. Consensus of data was set at four or above, which was highly desirable to the role of the CNE. This consensus was set prior to the data being sent out to the expert panel.

Five competencies scored below four and hence were not included in the survey questionnaire, and twelve competencies were compressed into other competency statements to give more concise statements and to prevent overlap. An overview of low scoring competencies and competencies that did not score as well as expected is given below.

### ***Lowest Scoring Competencies***

Five competency statements scored below four (highly desirable), 12%. They were:

- **Competency 17.** *Possess knowledge of educational opportunities within, and external to the organisation.*
- **Competency 30.** *Utilise effective counselling strategies to assist colleagues.*
- **Competency 35.** *Demonstrates an understanding of the structures and function of the health care system.*
- **Competency 37.** *Ensures that physical appearance is appropriate when at work.*
- **Competency 41.** *Conducts and contributes to nursing research.*

The competencies mentioned, while still scoring above desirable, did not score as well as other competency statements in the project. Possible explanations as perceived by the researcher are given below.

- **Competency 17** was expected to score well, as anecdotal evidence shows that CNEs act as careers advisers and educational advisers. The range of three to five demonstrates that a portion of the panel members believed that this competency was essential.
- **Competency 30** was uncertain, however counselling skills are thought by many to be a part of any senior nurse's repertoire. The range demonstrates that a portion of the panel members believed the role was essential.
- **Competency 35** was expected to score well, as an understanding of the health care system is considered essential for all workers within that health care system. The range, mode and medium demonstrate that a portion of the panel members believe that this competency statement was highly desirable or essential to the role.
- **Competency 37**, personal grooming was not expected to score well. The wide range demonstrates that at least one person felt this was irrelevant. It was the only irrelevant score of the competencies. It is however interesting to note that so many panel members scored it higher.
- **Competency 41**, conducts research was also not expected to score well as CNE are perceived as educators not researchers. However education should be research based. The range, mode and medium demonstrate that a portion of the panel members perceived that this competency was highly desirable or essential.

***Competencies That did not Rank as Well as Expected (Researcher Perception and Literature Based)***

- **Competency 6**, *demonstrates knowledge of adult learning principles*, scored a mean of 4.4 (HD, low) with a range from three to five (desirable too essential). This is interesting, as adult learning principles are the cornerstone of all education programs for adults, yet was not deemed essential by all panel members.
- **Competency 10**, *develops and implements planned educational programs (informal & formal)*, scored a mean of 4.3 (low in the highly desirable range). This is also interesting to note, as any educator, clinical or non-clinical would be required to develop and implement educational programs. The range of three to five (desirable to essential) demonstrates that certain panel members did not perceive this competency was essential.

- **Competency 11**, *evaluates effectiveness of educational strategies and implements changes as required*, scored a mean of 4.2 (low in HD range). This is interesting to note, as evaluation is perceived by most educationalists as essential for any education that takes place. The range of three to five demonstrates that certain panel members perceived the skill was only desirable not essential.
- **Competency 38**, *engages in reflective practice*, scored a mean of 4.35 (low in HD range). This is also interesting to note as reflective practice and research are basic RN competencies and it was taken from the ANCI competencies standard list. The range of three to five for competency 40 demonstrates that certain panel members felt differently.
- **Competency 39**, *demonstrates knowledge of nursing research*, scored only a mean of 4.14 (low in highly desirable range). A knowledge of nursing research is considered essential for all RNs, and must be considered essential for any educator who is teaching RNs. The range of three to five demonstrates that certain panel members did not consider this to be an essential skill for an educator to possess.
- **Competency 40**, *incorporates research into practice*, scored only a mean of 4.35 (low in HD range). This is interesting to note as incorporating research into practice is the basis of all nursing care and this competency is a basic RN entry level competency. The range of three to five demonstrates that certain panel members did not believe this to be an essential skill for a CNE to possess.

#### ***4.5 Pre Requisites Data Analysis - Delphi***

A list of pre requisites for the CNE role was given to the panel members in the second round. The list was generated from common knowledge of requirements, such as being a RN, and from comments in all domains in round one. The panel members were asked to rank the pre-requisites from essential to irrelevant. The pre-requisites are:

1. Registered Nurse
2. Evidence of continuing education
3. Post Basic Certificate in area of specialty
4. Bachelors Degree
5. Non Nursing Degree
6. Post Graduate Certificate - Nursing
7. Post Graduate Certificate - Nursing Education
8. Post Graduate Certificate - Education
9. Post Graduate Certificate - Non Nursing



10. Post Graduate Diploma - Nursing
11. Post Graduate Diploma - Nursing Education
12. Post Graduate Diploma - Education
13. Post Graduate Diploma - Non Nursing
14. Masters Degree
15. 3 years Clinical Experience
16. 5 years Clinical Experience
17. 7 years Clinical Experience.

### ***Pre Requisites Results By Domain***

The results of the data analysis carried out on the panel members scores have been broken down into three groups of pre requisites. The groups are undergraduate education domain, pre-requisites 1-5; tertiary education domain, pre-requisites 6-14; and clinical experience domain, pre-requisites 15-17.

### ***Undergraduate Domain***

A combination of the scores given by each panel member for the pre requisites statements in the undergraduate education domain are displayed in Table 4.7. Table 4.7 displays the results of all statistical tests carried out on the pre requisites in the undergraduate education domain.

**Table 4:7 Undergraduate Education Results**

<b>PRE REQUISITE</b>	<b>MEAN</b>	<b>MEDIUM</b>	<b>MODE</b>	<b>RANGE</b>	<b>STANDARD DEVIATION</b>
<b>1</b>	4.92	5	5	4-5	0.26
<b>2</b>	4.21	5	5	1-5	1.25
<b>3</b>	4.14	4	4	3-5	0.92
<b>4</b>	3.5	3	3	1-5	1.11
<b>5</b>	2	2	2	1-3	0.78

### **KEY**

- 1** Registered Nurse
- 2** Evidence of continuing education
- 3** Post Basic certificate in area of specialty
- 4** Bachelors Degree

### **Comments on the Undergraduate Education Pre Requisites**

The panel members ranked the undergraduate education pre-requisites as follows:

#### **Essential Scores**

Nil

#### **Highly Desirable Scores**

Pre requisite number 1 (*RN*), number 2 (*evidence of continuing education*) and number 3 (*Post basic specialty*) all scored means of above four (highly desirable). The mediums and modes demonstrate for pre requisite 1 and 2 that the majority, 100%, of the panel members perceived the pre requisites were essential to the CNE. Pre requisite 3 scored a medium and mode of four or highly desirable. The ranges for these three pre requisites demonstrate that the panel members were not in total agreement except for pre requisite 1 where the range was four to five. The standard deviations demonstrate that there is little variance from the mean in pre requisite 1, a large variance from the mean in pre requisite 2 and a moderate amount of variance from the mean in pre requisite 3.

#### **Desirable Scores**

Pre requisites 4 (*Bachelors degree in nursing*) scored a mean of 3.5 or desirable. The mode and medium demonstrate that the majority of the panel members, 71%, perceived that this pre requisite was desirable. The range demonstrated that at least one person perceived it was not essential to the role and one person perceived it was essential to the role. The standard deviation demonstrates that there was a large variance from the mean.

#### **Not Essential Scores**

Pre requisite 5 (*Non nursing degree*) scored a mean of two or not essential to the role. The medium and mode demonstrated that the majority, 100%, of the panel members perceived it was not essential or highly desirable to the role but the range illustrates that at least one person perceived it was irrelevant to the role and one person perceived it was desirable to the role. The standard deviation displays that there is a moderate amount of variance from the mean.

### ***Post Graduate Tertiary Domain***

A combination of the scores given by each panel member for the pre requisites statements in the post graduate education domain are displayed in Table 4.8. Table 4.8 displays the results of all statistical tests carried out on the pre requisites in the post graduate education domain.

**Table 4:8 Postgraduate Tertiary Education Results**

<b>PRE REQUISITE</b>	<b>MEAN</b>	<b>MEDIUM</b>	<b>MODE</b>	<b>RANGE</b>	<b>STANDARD DEVIATION</b>
<b>6</b>	3.42	3	3	3-5	0.75
<b>7</b>	3.07	3	3	2-4	0.73
<b>8</b>	2.92	3	3	1-5	0.99
<b>9</b>	1.92	2	1	1-4	0.99
<b>10</b>	2.78	3	3	1-4	0.80
<b>11</b>	3.42	4	4	2-4	0.64
<b>12</b>	3.21	3	3	2-5	0.86
<b>13</b>	1.92	2	2	1-3	0.61
<b>14</b>	2.92	3	3	2-4	0.73

### **KEY**

- 6** Post Graduate Certificate - Nursing
- 7** Post Graduate Certificate – Nursing Education
- 8** Post Graduate Certificate - Education
- 9** Post Graduate Certificate – Non Nursing
- 10** Post Graduate Diploma - Nursing
- 11** Post Graduate Diploma – Nursing Education
- 12** Post Graduate Diploma - Education
- 13** Post Graduate Diploma – Non Nursing
- 14** Masters Degree

### **Comments On The Post Graduate Tertiary Education Pre Requisites**

The panel members ranked the post graduate tertiary education pre-requisites as follows:

#### **Essential Scores**

Nil

## Highly Desirable Scores

Nil

## Desirable Scores

The highest scoring pre requisites in this area were pre requisite number 6 (*Post graduate certificate in nursing*), number 7 (*postgraduate certificate in nursing education*), number 11 (*postgraduate diploma in nursing education*) and number 12 (*post graduate diploma in education*) all with scores above three (desirable). No pre requisite scored above desirable in this area.

The modes of these four pre requisites demonstrate that the majority, 65%, of the panel members perceived the pre requisites was desirable, except for pre requisite 11 where the mode was four, or highly desirable. The ranges of these pre requisites demonstrate that the panel members held very different views on the significance of the pre requisites, with ranges from not essential to essential. However the standard deviation show little variance from the means.

## Not Essential Scores

Pre requisites number 8 (*post graduate certificate in education*), number 10 (*post graduate diploma in nursing*) and pre requisite number 14 (*Masters degree*) scored means of two or above (Not essential). The mediums and modes for all three of these pre requisites demonstrate that the majority, 77%, of the panel members perceived they were desirable. However the ranges demonstrate the varied views of the panel members with ranges from one to five or two to four. The standard deviations demonstrate the variance from the means.

## Irrelevant Scores

Pre requisite 9 (*postgraduate certificate non nursing*) and pre requisite 13 (*postgraduate diploma non nursing*) scored more than one or irrelevant. The medium and modes of these two pre requisites demonstrate that the majority, 100%, of the panel members did not perceive that these pre requisites were essential to the role of the CNE. The ranges are low for the pre requisites with many starting from one. The standard deviations demonstrate a variance from the mean in pre requisite nine but not in pre requisites 13.

## ***Clinical Experience***

A combination of the scores given by each panel member for the pre requisites statements in the clinical experience domain are displayed in Table 4.9. Table 4.9 displays the results of all statistical tests carried out on the pre requisites in the clinical experience domain.

**Table 4:9 Clinical Experience Results**

<b>PRE REQUISITE</b>	<b>MEAN</b>	<b>MEDIUM</b>	<b>MODE</b>	<b>RANGE</b>	<b>STANDARD DEVIATION</b>
<b>15</b>	4.21	5	5	3-5	0.89
<b>16</b>	4	4	3	3-5	0.88
<b>17</b>	3.35	3	3	2-5	1.01

### **KEY**

**15**     3 years clinical experience

**16**     5 years clinical experience

**17**     7 years clinical experience

### **Comments on the Clinical Experience Pre Requisites**

The panel members ranked the clinical experience pre-requisites as follows:

#### **Essential Scores**

Nil

#### **Highly Desirable Scores**

Pre requisite 15 (*three years clinical experience*) and pre requisite 16 (*five years of clinical experience*) scored means of four or above (*highly desirable*). The medium and mode for pre requisite 15 was five, indicating that the majority, 50%, of the panel members perceived that this pre requisite was essential. The range of this pre requisite demonstrates that at least one person perceived that the pre requisite was only desirable, but also at least one person perceived it was essential. The standard deviation of pre requisite 15 shows little variance from the mean.

The medium and mode for pre requisite 16 demonstrates that the majority of panel members, 64%, perceived that this pre requisite was desirable, however the range demonstrates that at least one person perceived it was essential and one person at least perceived it was only desirable. The standard deviation demonstrates little variance from the mean.

### **Desirable Scores**

Pre requisite 17 (*seven years clinical experience and above*) scored a mean of above three or desirable. The medium and mode for this pre requisite was three demonstrating that the majority of the panel members, 78%, perceived this pre requisite was desirable. The range indicates that at least one person perceived the pre requisite was not essential, but one also indicated that the pre requisite was essential. The standard deviation illustrates that there is a wide variance from the mean.

### ***Overall Comments on the PreRequisites***

The scores of the pre requisites vary greatly. The highest scoring pre requisites are number 1 (RN), number 2 (*evidence of continuing education*), number 3 (*post basic specialty courses*), number 15 (*three years clinical experience*) and number 16 (*five years clinical experience*). All only scored four or above, no pre requisite scored a mean of five or essential. Hence the conclusion that besides being a RN, experience and hospital based or non-tertiary based education is seen as the most significant pre requisite for the role of the clinical educator. This will be discussed further in the discussion section.

The lowest scoring pre requisites were in the postgraduate tertiary education area, with non-nursing graduate certificates and diplomas only scoring one or two, irrelevant or not essential. This was expected, as it is perceived that nursing or education courses beneficial to clinical educators. However, it was unexpected that not one postgraduate tertiary course scored above desirable, this includes a Bachelors Degree and a PostGraduate Certificate.

## ***4.6 CNE Survey Data***

Data analysis was conducted on the survey questionnaire, the demographic data collected, and results from the survey participants to the list of pre requisites. Data analysis is represented in the following categories: demographic data; main survey questionnaire, pre requisites results; and results of the three specific sub categories.

Clinical educators from the seven major teaching hospitals used previously, were contacted to ascertain their willingness to be involved in the survey. The educators were only contacted after the Directors of Nursing had been spoken to from each hospital. Thirty clinical educators were chosen to be part of the research study, with ten from each sub category included. As mentioned previously, the sub categories were identified through job advertisements and anecdotal evidence, such as the CNEs and managers discussing various clinical education roles. The sub categories were:

1. Clinical educators recognised by other work titles;
2. Clinical educator on one ward or unit only;
3. Clinical educator for specific population such as Trainee Enrolled Nurses.

The survey booklet was piloted with five non participant clinical educators prior to being sent to the survey participants. The pilot study was discussed at length in Chapter Three. Once the CNE agreed to be involved in the research study, a written consent form, comprehensive demographic form and a survey booklet were forwarded to the prospective participant at their work address.

The results of Round two of the Delphi technique were used as a foundation for the survey questionnaire. All competencies that obtained a mean of above four (HD) in Round two of the Delphi were considered for the survey. Hence 5 competencies were removed from the list due to their low score, which resulted in 36 competencies. Comments from round two of the Delphi were then used to rewrite competencies and to compress competencies together to give concise statements. The result was 24 competency statements, with 12 competencies being compressed into other competencies. Competencies such as planning, implementing and evaluating educational programs, were perceived as an ongoing circular process that is required to be completed as a whole process instead of in parts.

The competencies were written in the same format as the competencies had been in Round two. A competency statement, a verbal description and two or more elements to describe how the competency would be assessed in the workplace were used.

Pre requisites that obtained scores of above two were included in the second round.

The reason for the inclusion of the low scoring pre requisites was due in part to the researcher's belief that the clinical educators themselves would consider that more education was required to fulfill their role than the experts. An area for comment from the survey participants was included in the booklet and the participants were encouraged to make as many comments as they wished.

An information sheet was included in the survey booklet to assist the participants to complete the booklet. Information included: the definition of a CNE; the definition of a competency; and a definition of the scale used. Other information included was: how the competencies had been generated; previous rounds with the Delphi panel; and why the six domains had been chosen. The researcher's name and contact phone number was included to assist the participants. Only one person contacted the researcher to seek an extension of the time given.

In the main part of the survey booklet the participants were required to examine each competency statement and to agree or disagree that the competency was required by a CNE or clinical educator to fulfill their role. This type of response was required of the participants to ensure that they made a stance. The participants as clinical educators were thus required to say that each competency was essential for them or it had no relevance for them. This stance, to agree or disagree, was taken as it was perceived in the workplace that a worker either had the ability to perform the competency or does not have the ability. There is no grey area. By giving the participants only two choices they were required to be mindful of their workplace and the needs of the educators who work in the clinical area.

A reminder telephone call was placed to eight people who had not returned the survey booklet by the due date. After six weeks, twenty-nine people had returned completed survey forms, giving a response rate of 97%. Many participants wrote that they appreciated being asked finally about their role. Due to such an excellent response rate all three-sub categories were evenly represented. All survey forms were filled out correctly with a large amount of comments, approximately fifty, written in the area provided at the end of each domain.

The analysis of the survey data is broken down into the following groups. Demographic data analysis; analysis of results by domain; comments given in each domain by the survey participants; analysis of pre requisites by area; and analysis for each specific sub category.



## 4.7 Analysis of Survey Participants Demographics Results

### *Position Titles Used by CNEs*

A combination of the scores given by each survey participant for the demographic question, 'please state your current position title', are displayed in Table 4.10.

**Table 4.10 Position Titles Used by CNEs (N =29)**

<b>TITLE USED</b>	<b>AMOUNT</b>	<b>PERCENTAGE</b>
Clinical Practice Coordinator	2	7%
Clinical Care Coordinator	1	3.4%
Clinical Resource Nurse	2	7%
Clinical Coordinator	2	7%
Clinical Nurse Coordinator	1	3.4%
Clinical Care Coordinator – Education	1	3.4%
Clinical Nurse Specialist / Specialty Service	1	3.4%
Clinical Nurse Specialist / Education	1	3.4%
Clinical Nurse Specialist / Skill Development	1	3.4%
Clinical Nurse Specialist / Education & Skill Development	1	3.4%
Clinical Nurse Educator	16	55%
<b>TOTAL</b>	<b>29</b>	<b>100%</b>

Of the twenty-nine respondents to the survey, eleven different titles were used to describe their work. The titles often sounded similar, with all using the word clinical with different degrees of emphasis. While the word clinical was used in all, the word education was only used in three, or 9%.

One of the specific groups included in this survey, were clinical educators by titles other than the state award title. The initial group was only 10 or 33%, however in the final analysis 13 or 45% of clinical educators were known at work by a different title from the NSW state award title of CNE. All clinical educators were recruited through their Directors of Nursing who were asked if they employed any Clinical Nurse Educators. The largest percentage of participants, 55%, actually had the correct state award title, that of Clinical Nurse Educator.

### ***Award Grade of Position***

A combination of the scores given by each survey participant for the demographic question, 'please state what is the present award grade of your position', are displayed in Table 4.11.

**Table 4.11 Award Grade Position of Survey Participants (N = 29)**

<b>AWARD</b>	<b>AMOUNT</b>	<b>PERCENTAGE</b>
Clinical Nurse Specialist	25	86%
Nurse Educator	4	14%
<b>TOTAL</b>	<b>29</b>	<b>100%</b>

The participants were either paid as a Clinical Nurse Specialist or a Nurse Educator, with the majority, 86%, being paid as a Clinical Nurse Specialist which is the current award pay rate for CNEs.

### ***Age of Participants***

A combination of the scores given by each survey participant for the demographic question, 'what is your age', are displayed in Table 4.12.

**Table 4.12 Age Range of Survey Participants (N = 29)**

<b>AGE</b>	<b>AMOUNT</b>	<b>PERCENTAGE</b>
21 – 30	8	28%
30 – 39	13	45%
40 –49	7	24%
50 – thereafter	1	3%
<b>TOTAL</b>	<b>29</b>	<b>100%</b>

The age of the participants was asked to ascertain bias due to age. As expected the majority of the participants were in the 21 to 39 range, 21 or 72%. With only 28% in the 40 or thereafter range. As clinical education is perceived as one of the beginning rungs of a nursing career it would be expected that clinical educators would be younger than the expert panel, who are expected to be towards the end of the education career.

### ***Gender of Participants***

A combination of the scores given by each survey participants for the demographic question, 'please state your gender', are displayed in Table 4.13.

**Table 4.13 Gender of Survey Participants (N = 29)**

<b>GENDER</b>	<b>AMOUNT</b>	<b>PERCENTAGE</b>
Male	6	21%
Female	23	79%
<b>TOTAL</b>	<b>29</b>	<b>100%</b>

The gender of the participants was indicative of the nursing workforce with the majority being female, 79%. However 21% were male, which is greater than the male percentage in clinical nursing, which is approximately 14% (NSW Department of Health, 1994).

### ***Highest Nursing Qualification***

A combination of the scores given by each survey participant for the demographic question, 'please state your highest nursing qualification', are displayed in table 4.14.

**Table 4.14 Highest nursing qualification held by survey participants (N = 29)**

<b>QUALIFICATION</b>	<b>AMOUNT</b>	<b>PERCENTAGE</b>
Hospital Based Certificate	10	34%
Diploma	2	7%
Degree	11	39%
Graduate Diploma	3	10%
Masters	3	10%
<b>TOTAL</b>	<b>29</b>	<b>100%</b>

The highest nursing qualification was asked of each participant, with a short range given to him or her to choose from. Area was provided for the participant to write other qualifications if required. The largest percentage, 38%, of participants had a Bachelors Degree in Nursing as their highest qualification. The next largest group had a Hospital Based Certificate as their highest qualification, 34%. This was interesting to note, but not unexpected.

What is also interesting to note is that 10%, or three participants, had Masters degree as their highest qualification. This is a higher degree and was not considered to be essential to the expert panel. The most surprising aspect is that a person possessing a Master's qualification is in a position that is considered by management and clinicians as a relatively low education position.

### ***Education Courses Attended***

A combination of the scores given by each survey participant for the demographic question, 'please state any education courses attended by you', are displayed in table 4.15.

**Table 4.15 Education courses attended by survey participant (N = 29)**

<b>COURSE</b>	<b>AMOUNT</b>	<b>PERCENTAGE</b>
College of Nursing	6	21%
University	6	21%
Hospital / Area Health Service	13	45%
Associate Degree – teaching	1	3%
Nil	3	10%
<b>TOTAL</b>	<b>29</b>	<b>100%</b>

The majority of clinical educators had attended at least one educational course with only 10% stating they had never attended an educational course. This is a major concern. The majority of educators, 45%, had attended an educational course conducted by their hospitals or Area Health Services. The courses conducted by these institutions are normally short, skill based courses, assisting the participant to learn the strategies of adult education.

### ***Length of Time in Position***

A combination of the scores given by each survey participant for the demographic question, 'please state the length of time you have held this present position for', are displayed in table 4.16.

**Table 4.16      Length of Time in Current Position for Survey Participants (N = 29)**

LENGTH OF TIME	AMOUNT	PERCENTAGE
1 – 6 months	6	21%
7 – 12 months	5	17%
1 – 2 years	10	34%
3 – 5 years	4	14%
6 – 20 years	4	14%
<b>TOTAL</b>	<b>29</b>	<b>100%</b>

The majority of participants, 72%, had been in their present position for less than two years. Of this large group, 34% had been in their position for one to two years. This result supports anecdotal evidence (from managers) and literature that clinical educators stay for only short period of times in their position. The literature states quite clearly the problems associated with this role that causes nurses to leave the position. What is also interesting to note, is that 28% had been in their current positions for three years or more, with 14% having been in their current position for six to 20 years. This is a considerable time in one nursing position.

### ***Level of Responsibility***

A combination of the scores given by each survey participant for the demographic question, 'please state the level of responsibility you have in this present position', are displayed in table 4.17.

**Table 4.17      Level of Responsibility Held by Survey Participants (N = 29)**

LEVEL	AMOUNT	PERCENTAGE
1 ward	10	34%
2-5 wards	4	14%
5 plus wards	4	14%
Specific groups	11	38%
<b>TOTAL</b>	<b>29</b>	<b>100%</b>

### ***Overview of Demographic Data from the Survey***

The twenty nine returning survey participants retained eleven different work titles, with two different award payments, that of CNS and NE. The majority of the survey participants were female, 79%, with a Bachelor of Nursing or a Hospital Based Certificate as their highest nursing qualification, however 10% of them possessed a Masters Degree.

The majority of the survey participants, 72%, had spent less than two years in their current position. The majority, 66%, worked on more than one ward/unit and answered to someone other than the Nursing Unit Manager of a ward, in direct opposition to the NSW Award (1995). As a whole the demographic data of the survey participants was as expected.

### ***4.8 Survey Results by Domains***

The following is an overview of the results of the survey. As stated previously, the participants were required to make a stance and state whether they agreed or disagreed with the relevance of the competency statement to their work. An area was provided for comment after each domain. It is interesting to note, that the majority of the participants did give comments, some brief, others in more in detail. Details of comments are provided in each domain. However general comments were also made. A brief overview of the comments are given below.

- ‘The competencies listed seem to fall outside of the boundaries listed in the award for the CNE. This shows me that CNEs as a group are grossly over utilised and underpaid.’
- ‘As CNEs are paid so little I cannot have high pre-requisites for the role.’
- ‘With the responsibility and the added stresses involved in being a CNE with the multi-skilling and the medications that are used, the CNE should be entitled to a higher wage.’
- ‘CNE are paid too little and are regarded as a general “jack of all trade” by all staff members.’

The results of the survey are broken down into the six domains with an overview of the comments given by the participants after each domain. The results of the pre requisites are broken down into three major segments, undergraduate education, postgraduate education and clinical experience, as was performed for the expert panel responses.

Prior to the survey the researcher decided that if two or more survey participants disagreed with a competency statement then the competency statement would not be included in the final list.

- ‘Need to be respected by peers, have a sound knowledge of all aspects of clinical care and be an integral team member - a role model’.
- ‘Is able to use other staff’s level of expertise to assist in developing skills of staff’.
- ‘I feel with technology that it needs to be relevant and used in the hospital where the CNE is educating’
- ‘A facilitator of research within the clinical area’.
- ‘Should encourage staff members to act as patient advocates’.
- ‘Extreme diplomacy is required to gain the respect of colleagues, this applies even when the CNE qualifications and experience is obvious’.

### ***Education Domain***

Table 4.20 displays the agreed and disagreed scores of all competencies in the education domain.

**Table 4.20 Education Domain Results**

<b>COMPETENCY</b>	<b>AGREE</b>	<b>PERCENTAGE</b>	<b>DISAGREE</b>	<b>PERCENTAGE</b>
<b>5</b>	28	96%	1	3.4%
<b>6</b>	29	100%	0	0%
<b>7</b>	29	100%	0	0%
<b>8</b>	29	100%	0	0%
<b>9</b>	29	100%	0	0%
<b>10</b>	29	100%	0	0%
<b>11</b>	28	96%	1	3.4%

### **KEY**

- 5** Demonstrates knowledge of adult learning principles
- 6** Applies educational strategies to assess individual and groups
- 7** Develops, implements and evaluates planned educational programs within the clinical area
- 8** Provides effective and constructive feedback to learners, peers and other stakeholders
- 9** Engages effectively in clinical teaching
- 10** Demonstrates the ability to link theory with practice
- 11** Acts responsively to new and innovative ideas

- ‘The CNE must be innovative, open and research minded, because I have found from experience that CNEs with these qualifications can be so effective in promoting new ideas with the aim of improving patient outcomes.’
- ‘This area was difficult in the beginning because of the expectations. Only realising that with confidence and good training these competencies are reached and having an understanding of adult education. Educating and other educators assist you to learn.’

### ***Managerial Domain***

Table 4.21 displays the agreed and disagreed scores of all competencies in the managerial domain.

**Table 4.21 Managerial Domain Results**

COMPETENCY	AGREE	PERCENTAGE	DISAGREE	PERCENTAGE
12	29	100%	0	0%
13	28	96%	1	3.4%
14	29	100%	0	0%
15	28	96%	1	3.4%

#### **KEY**

- 12 Effectively plans and prioritises education
- 13 Utilises resources effectively and efficiently
- 14 Maintains accurate records and documentation
- 15 Actively participates in relevant committees

### **Analysis of the Results in the Management Domain**

There were four competencies in this domain. Two competencies received a negative scoring by one person within the survey. These competencies were competency 13, *utilises resources effectively and efficiently*, and competency 15, *actively participates in relevant committees*.

Competency 13 *utilises resources effectively and efficiently* scored a mean of 4.28 in the second round of the Delphi panel, which is highly desirable but in the lower ranking of the competencies that were included in the survey. Competency 15 *actively participates in relevant committees* scored four, which is highly desirable, but was on the borderline, as four was the lowest score for inclusion.



## KEY

- 16 Communicates effectively and appropriately
- 17 Establishes and maintains collaborative relationships with all members of the health care team
- 18 Demonstrates ability to manage and resolve conflict

### Analysis of the Results from the Interpersonal Domain

This domain was amongst the smallest of the domains in the survey as it contained only three competency statements. Of the three competencies, one, competency 18, received two negative scores. This was the only competency statement in the survey to score two negative scores. The competency statement was '*demonstrates ability to manage and resolve conflict*'. In the second round of the expert panel this competency scored a mean of 4.28 which is highly desirable but in the lower range.

### Comments from the interpersonal domain

A sample of the anecdotal comments from the participants regarding the interpersonal domain are written below. These comments were written at the end of the interpersonal domain.

- 'Competency 18 *demonstrates ability to manage and resolve conflict*, should be part of the managers' role to investigate conflict and resolutions.'
- 'All these elements are important, good communication helps to get the point across. It is important to be understood, ineffective communication leads to poor patient care and time losses.'
- 'I strongly disagree with competency 18, *demonstrates ability to manage and resolve conflict* in my opinion this is purely a management component. There are too many instances where educators are expected to be managers as well. This is unrealistic and inappropriate.'

### Professional Domain

Table 4.23 displays the agreed and disagreed scores of all competencies in the professional domain.

**Table 4.24 Reflective Practice Domain results**

COMPETENCY	AGREE	PERCENTAGE	DISAGREE	PERCENTAGE
22	29	100%	0	0%
23	29	100%	0	0%
24	29	96%	1	3.4%

**KEY**

- 22 Engages in reflective practice
- 23 Demonstrates knowledge of nursing research
- 24 Incorporates research into practice

**Analysis of the Results in the Reflective Domain**

Two competencies in this domain scored ranks of 100%, with all members of the survey in agreement that the competencies 22, *engages in reflective practice*, and 23, *demonstrates knowledge of nursing research*, were required for a CNE to fulfill their role. Competency 24, *incorporates research into practice*, scored one negative score, without any comment. It is interesting to note that in the second round of the expert panel, the competencies scored means above highly desirable but with one low ranking score, for competency 23, *demonstrates knowledge of nursing research*, with a mean of 4.14.

**Comments from the reflective practice domain.**

A sample of the comments from the participants regarding the reflective practice domain are written below. These comments were written at the end of the reflective practice domain.

- ‘A large part of my job is conducting research projects. There is a lot of pressure to conduct research and the CNE is often the one who initiates and conducts the bulk of research projects.’
- ‘Reflective practice is very important if a CNE is not able to reflect on his / her practice, it is doubtful that they will assist anyone in this role.’
- ‘I know many CNEs that research clinical practice but then they don’t follow through and change practice.’
- ‘I would like to see reflection as a competency, but I doubt whether many CNEs either know how or want to do this. I don’t even know if I do this and I have some exposure to the practice and the principles behind it.’

#### **4.9     *Pre Requisites Data Analysis - Survey***

The following is a list of pre requisites for employment as a CNE that were included in the survey. The participants were required to tick if they agreed that the pre requisite was necessary to fulfill the role of CNE, or to leave blank if they disagreed. The list is similar to that given to the experts in the second round, however non-nursing graduate certificates and diplomas have been removed because they were considered irrelevant or not essential to the role of the CNE, by the second round of the Delphi.

1.     Registered Nurse
2.     Evidence of continuing education
3.     Post Basic Certificate in area of specialty
4.     Bachelors of Nursing Degree
5.     Post Graduate Certificate - Nursing
6.     Post Graduate Certificate - Nursing Education
7.     Post Graduate Certificate - Education
8.     Post Graduate Diploma - Nursing
9.     Post Graduate Diploma - Nursing Education
10.    Post Graduate Diploma - Education
11.    Masters Degree
12.    Three years Clinical Experience
13.    Five years Clinical Experience
14.    Seven years Clinical Experience

#### ***Pre Requisite Results by Domains***

Data is presented in the three categories of undergraduate domain, post graduate domain and clinical experience domain. At the end of the analysis of pre-requisites by domain, the demographic data of the survey participants, second round Delphi scores and survey pre-requisite scores are outlined. This overview is provided to tie in all the data collected within this research study and compare not only the expert panel responses with the survey participants responses but to also compare to ‘real life’ CNE data.

#### ***Undergraduate Domain***

Table 4.25 displays the scores generated by the survey participants considered this domain of pre requisite essential to the role of the CNE.

**Table 4.25 Undergraduate Education Results**

PRE REQUISITE	ESSENTIAL TO A CNE	PERCENTAGE
1	29	100%
2	28	96%
3	27	93%
4	16	55%

**KEY**

- 1 Registered Nurse
- 2 Evidence of continuing education
- 3 Post basic certificate in area of specialty
- 4 Bachelors of nursing degree

**Analysis of Results from the Pre Requisites in the Undergraduate Domain**

There were five areas in this domain dealing with undergraduate education. All areas scored between 90 and 100% except for pre requisite 4, *Bachelors of nursing degree*, which scored a 55% agreement.

The highest scoring pre requisite was number 1, *Registered Nurse*, with 100% agreement. This was expected as only registered nurses can be Clinical Educators at this present time. This pre requisite was however still included as there are now non nurse educators working in faculties of nursing/tertiary sector who may well have to deal with a clinical component of the current undergraduate education programs for nurses. The trend however had not yet spread to post graduate based education. Continuing education scored 96% agreement, *possession of a post basic certificate in an area of specialty*. This is interesting as at least 33% of the survey participants did not educate in one specialty but across a broad range of specialities, yet they perceived a specific post registration course was required to fulfill their role.

***Post Graduate Domain***

A combination of the scores given from each survey participant for the pre requisite statements in the post graduate education domain are displayed in Table 4.26. Table 4.26 displays the scores generated and the percentages of the agreement stance.

**Table 4.26 Post Graduate Tertiary Education Results**

PRE REQUISITE	ESSENTIAL FOR A CNE	PERCENTAGE
5	4	14%
6	13	45%
7	13	45%
8	6	21%
9	8	27%
10	8	27%
11	2	7%

**KEY**

- 5 Post graduate certificate - Nursing
- 6 Post graduate certificate – Nursing Education
- 7 Post graduate certificate - Education
- 8 Post graduate diploma - Nursing
- 9 Post graduate diploma – Nursing Education
- 10 Post graduate diploma - Education
- 11 Masters degree

**Analysis of Results from The Post Graduate Domain**

This was the largest domain in the pre requisite area with seven pre requisites included. All pre requisites obtained very different scores ranging from 7% to 45% agreement. The lowest scoring pre requisite was number 11, *Masters degree*. This was be expected for this position, which is clinically based and not seen as an academic post. However it is interesting to note that two clinical educators did believe it was required to fulfill their role. In the demographics section it is noted that three participants held a Masters Degree in Nursing. As nurses become more academically educated this qualification is becoming more common place and relevant for the role.

The second lowest scoring pre requisite was number 5, *post graduate certificate in a nursing specialty*, with a 14% agreement that it was required. A *post graduate diploma in nursing*, also scored low with a 21% agreement. In the demographic breakdown, 10% of survey participants held a graduate diploma in nursing or related specialties.

Pre requisites 9 and 10 scored 27% agreement, which are, *post graduate diploma in nursing education* and *post graduate diploma in education* respectively. Pre requisite 6 and 7, *post graduate certificates in nursing education* and *education* respectively, scored the highest percentage in this domain with 45% agreement.

In the analysis of this data it is interesting to note that 45% perceived that a graduate certificate of education or nursing education was required to fulfill the role of the CNE. 27% of the survey participants believed that a graduate diploma in nursing education or a graduate diploma in education was required to fulfill the role of CNE, while 10% believed a masters degree was required. Yet only 10% of the survey participants held a graduate diploma in nursing, nursing education or related specialties, and 10% held a master's degree.

### ***Clinical Experience Domain***

A combination of the scores given by each survey participant for the pre requisite statements in the clinical experience domain are displayed in Table 4.27. Table 4.27 displays the scores generated and the percentages of the agreement stance.

**Table 4.27 Clinical Experience Results**

PRE REQUISITE	ESSENTIAL FOR A CNE	PERCENTAGE
12	5	17 %
13	17	59 %
14	3	11 %

#### **KEY**

- 12      3 years clinical experience
- 13      5 years clinical experience
- 14      7 years clinical experience

### **Analysis of Results from the Clinical Domain Pre Requisites**

This section on pre requisites was the smallest of the three pre requisite sections, with only 3 pre-requisites dealing with length of time in the clinical area. Pre requisites 12, *3 years' clinical experience*, was seen as essential by 18% to fulfill the role of the CNE.

Pre requisite 13, *5 years clinical experience*, was seen as essential by 59% and pre requisite 14, *7 years clinical experience*, was seen as essential by 10%. The data showed that 70% of the survey participants perceived that five to seven years' clinical experience is required to fulfill the role of the CNE.

#### ***4.10 Survey data Comparison with Demographic Data and Second Round Delphi Data***

Table 4.28 displays a comparison of three issues. The survey participant's responses to the list of pre requisites, the experts panel responses to the pre requisites and an analysis of the demographics of the survey participants. This table displays the differences between the expert's perceptions and the survey participant's perceptions regarding the necessary pre requisites for a CNE to fulfill their role. The survey participants demographic data were included to demonstrate that CNE's may or may not possess the qualifications that they perceive are necessary for them to fulfill the role of the CNE.

**4.28 Comparison Table - Undergraduate Education Qualifications**

<b>PRE REQUISITE GIVEN TO CNE</b>	<b>SURVEY RESPONSE</b>	<b>SECOND ROUND DELPHI</b>	<b>DEMOGRAPHICS SURVEY PARTICIPANTS</b>
1.	100%	4.92 (HD)	100%
2.	96%	4.21 (HD)	100%
3.	93%	4.14 (HD)	
4.	55%	3.5 (D)	38%

#### **KEY**

- 1** Registered Nurse
- 2** Evidence of continuing education
- 3** Post basic certificate in area of specialty
- 4** Bachelors degree in nursing

In the demographic breakdown of the survey participants, 38% held a degree in nursing, whether as a primary undergraduate degree or one they studied for after obtaining the hospital based certificate.

In the second round of the Delphi this pre requisite scored a mean of 3.5, which is desirable. The range for this pre requisite was one to five, which demonstrates that at least one expert perceived it was totally irrelevant to the role of the CNE.

In the second round of the panel of experts, a specialty post registration qualification scored a mean of 4.3 or highly desirable. This question was not asked in the demographic section.

In the second round of the Delphi, post graduate certificates in nursing education and education scored means of 3.07 (Desirable) and 2.92 (Not essential). Post graduate certificate qualifications were not included in the demographic breakdown of survey participants.

Table 4.29 displays a comparison of three issues. The survey participant's responses to the list of pre requisites, the expert panel responses to the pre requisites and an analysis of the demographic of the survey participants, in the post graduate domain. Table 4.29 displays the differences between the expert's perceptions and the survey participant's perceptions regarding the necessary pre requisites for a CNE to fulfill their role. The survey participant's demographic data was included to demonstrate that CNE may or may not possess the qualifications that they perceive are necessary for them to fulfill the role of the CNE.

**4.29 Comparison Table - Post Graduate Qualifications**

<b>PRE REQUISITE OF CNE</b>	<b>SURVEY RESPONSE</b>	<b>SECOND ROUND DELPHI</b>	<b>DEMOGRAPHICS SURVEY PARTICIPANTS</b>
5.	14%	3.42 (D)	
6.	45%	3.07 (D)	
7.	45%	2.92 (NE)	
8.	21%	2.78 (NE)	10%
9.	27%	3.42 (D)	
10.	27%	3.21 (D)	
11.	7%	2.92 (NE)	10%

**KEY**

- 5 Post graduate certificate in nursing
- 6 Post graduate certificate in nursing education
- 7 Post graduate certificate in education
- 8 Post graduate diploma in nursing



- 9 Post graduate diploma in nursing education
- 10 Post graduate diploma in education
- 11 Masters Degree

Table 4.30 displays a comparison of three issues. The survey participants' responses to the list of pre requisites, the expert panels' responses to the pre requisites and an analysis of the demographics of the survey participants. This table displays the differences between the expert's perceptions and the survey participant's perceptions regarding the necessary pre requisites for a CNE to fulfill their role. The survey participants demographic data was included to demonstrate that CNE may or may not possess the experience that they perceive is necessary for them to fulfill the role of the CNE.

**4.30 Comparison Table - Clinical Experience**

<b>PER REQUISITE</b>	<b>SURVEY RESPONSE</b>	<b>SECOND ROUND DELPHI</b>	<b>DEMOGRAPHICS SURVEY PARTICIPANTS</b>
12	17%	4.21 (HD)	N/A
13	59%	4 (HD)	N/A
14	11%	3.35 (D)	N/A

**KEY**

- 12 3 years clinical experience
- 13 5 years clinical experience
- 14 7 years clinical experience

In the second round of the Delphi, 3 years clinical experience received a mean of 4.21 (Highly Desirable), 5 years clinical experience received a mean of four (Highly Desirable) and 7 years clinical experience received a mean of 3.35 (Desirable). Length of clinical experience was not asked of the survey participants, however length in present job was asked, with 14% having more than six to 20 years' experience and 14% having three to five years experience. This is a moderate amount of experience in each position and questions the validity of anecdotal evidence suggesting that the CNEs remain in this position for only a short time.

#### 4.11 Survey Data Analysis by Specific Sub Categories

Three specific sub categories of clinical educators were selected prior to the research project commencing to be studied in the survey component of the research. Members of the groups were all clinical educators but possessed slightly different characteristics, either in their work titles or in the groups that they educated. Each sub category had ten members in it. The groups were:

- |          |  |
|----------|--|
| Group A. | Clinical Nurse Educators known by other titles;  |
| Group B. | Clinical Nurse Educators working on one ward/unit;   |
| Group C. | Clinical Nurse Educators working with a target population such as Trainee Enrolled Nurses. |

The data from all three groups has been analysed together previously, however this data is now further broken down to ascertain if there was significant differences between the groups answers to the survey. Each set of group answers, under the classification of group A, B or C will be discussed individually. Tables demonstrate the participant number, their answers to the competency statement, pre requisites they deemed were essential to the role of the CNE and pertinent demographic details about them.

### Codes Used for Tables:

- *Competency Section*

Agree / Disagree      The participant either agrees or disagrees with the competency statements

- *Demographic Section*

Age	The age range of the participant is given in this section
-----	---

F / M	Whether the participant is male or female
-------	---

Degree/ Grad. Dip./ Hospital / Diploma / Masters - Their highest nursing qualification

CON / Hosp. / Uni / Ass. Dip. - Education courses attended by them

1 / 2-5 / 5 plus / - The wards they educate in

Man. Area / Man. Ed / NUM / DON / DDON/ SNM ER

Who they have line responsibility to, manager of an area or education / nursing unit manager / director of nursing or deputy / senior nurse manager employee relations

- *Pre requisite Section*

Post Basic Cert.	Post Basic Certificate
<p>1. <u>Mathematics</u></p> <p>2. <u>Science</u></p> <p>3. <u>History</u></p> <p>4. <u>Geography</u></p> <p>5. <u>Physical Education</u></p> <p>6. <u>Art</u></p> <p>7. <u>Music</u></p> <p>8. <u>Language</u></p> <p>9. <u>Computer Science</u></p> <p>10. <u>Business Studies</u></p> <p>11. <u>Health Education</u></p> <p>12. <u>Environmental Studies</u></p> <p>13. <u>Information Technology</u></p> <p>14. <u>Mathematics</u></p> <p>15. <u>Science</u></p> <p>16. <u>History</u></p> <p>17. <u>Geography</u></p> <p>18. <u>Physical Education</u></p> <p>19. <u>Art</u></p> <p>20. <u>Music</u></p> <p>21. <u>Language</u></p> <p>22. <u>Computer Science</u></p> <p>23. <u>Business Studies</u></p> <p>24. <u>Health Education</u></p> <p>25. <u>Environmental Studies</u></p> <p>26. <u>Information Technology</u></p> <p>27. <u>Mathematics</u></p> <p>28. <u>Science</u></p> <p>29. <u>History</u></p> <p>30. <u>Geography</u></p> <p>31. <u>Physical Education</u></p> <p>32. <u>Art</u></p> <p>33. <u>Music</u></p> <p>34. <u>Language</u></p> <p>35. <u>Computer Science</u></p> <p>36. <u>Business Studies</u></p> <p>37. <u>Health Education</u></p> <p>38. <u>Environmental Studies</u></p> <p>39. <u>Information Technology</u></p> <p>40. <u>Mathematics</u></p> <p>41. <u>Science</u></p> <p>42. <u>History</u></p> <p>43. <u>Geography</u></p> <p>44. <u>Physical Education</u></p> <p>45. <u>Art</u></p> <p>46. <u>Music</u></p> <p>47. <u>Language</u></p> <p>48. <u>Computer Science</u></p> <p>49. <u>Business Studies</u></p> <p>50. <u>Health Education</u></p> <p>51. <u>Environmental Studies</u></p> <p>52. <u>Information Technology</u></p> <p>53. <u>Mathematics</u></p> <p>54. <u>Science</u></p> <p>55. <u>History</u></p> <p>56. <u>Geography</u></p> <p>57. <u>Physical Education</u></p> <p>58. <u>Art</u></p> <p>59. <u>Music</u></p> <p>60. <u>Language</u></p> <p>61. <u>Computer Science</u></p> <p>62. <u>Business Studies</u></p> <p>63. <u>Health Education</u></p> <p>64. <u>Environmental Studies</u></p> <p>65. <u>Information Technology</u></p> <p>66. <u>Mathematics</u></p> <p>67. <u>Science</u></p> <p>68. <u>History</u></p> <p>69. <u>Geography</u></p> <p>70. <u>Physical Education</u></p> <p>71. <u>Art</u></p> <p>72. <u>Music</u></p> <p>73. <u>Language</u></p> <p>74. <u>Computer Science</u></p> <p>75. <u>Business Studies</u></p> <p>76. <u>Health Education</u></p> <p>77. <u>Environmental Studies</u></p> <p>78. <u>Information Technology</u></p> <p>79. <u>Mathematics</u></p> <p>80. <u>Science</u></p> <p>81. <u>History</u></p> <p>82. <u>Geography</u></p> <p>83. <u>Physical Education</u></p> <p>84. <u>Art</u></p> <p>85. <u>Music</u></p> <p>86. <u>Language</u></p> <p>87. <u>Computer Science</u></p> <p>88. <u>Business Studies</u></p> <p>89. <u>Health Education</u></p> <p>90. <u>Environmental Studies</u></p> <p>91. <u>Information Technology</u></p> <p>92. <u>Mathematics</u></p> <p>93. <u>Science</u></p> <p>94. <u>History</u></p> <p>95. <u>Geography</u></p> <p>96. <u>Physical Education</u></p> <p>97. <u>Art</u></p> <p>98. <u>Music</u></p> <p>99. <u>Language</u></p> <p>100. <u>Computer Science</u></p> <p>101. <u>Business Studies</u></p> <p>102. <u>Health Education</u></p> <p>103. <u>Environmental Studies</u></p> <p>104. <u>Information Technology</u></p> <p>105. <u>Mathematics</u></p> <p>106. <u>Science</u></p> <p>107. <u>History</u></p> <p>108. <u>Geography</u></p> <p>109. <u>Physical Education</u></p> <p>110. <u>Art</u></p> <p>111. <u>Music</u></p> <p>112. <u>Language</u></p> <p>113. <u>Computer Science</u></p> <p>114. <u>Business Studies</u></p> <p>115. <u>Health Education</u></p> <p>116. <u>Environmental Studies</u></p> <p>117. <u>Information Technology</u></p> <p>118. <u>Mathematics</u></p> <p>119. <u>Science</u></p> <p>120. <u>History</u></p> <p>121. <u>Geography</u></p> <p>122. <u>Physical Education</u></p> <p>123. <u>Art</u></p> <p>124. <u>Music</u></p> <p>125. <u>Language</u></p> <p>126. <u>Computer Science</u></p> <p>127. <u>Business Studies</u></p> <p>128. <u>Health Education</u></p> <p>129. <u>Environmental Studies</u></p> <p>130. <u>Information Technology</u></p> <p>131. <u>Mathematics</u></p> <p>132. <u>Science</u></p> <p>133. <u>History</u></p> <p>134. <u>Geography</u></p> <p>135. <u>Physical Education</u></p> <p>136. <u>Art</u></p> <p>137. <u>Music</u></p> <p>138. <u>Language</u></p> <p>139. <u>Computer Science</u></p> <p>140. <u>Business Studies</u></p> <p>141. <u>Health Education</u></p> <p>142. <u>Environmental Studies</u></p> <p>143. <u>Information Technology</u></p> <p>144. <u>Mathematics</u></p> <p>145. <u>Science</u></p> <p>146. <u>History</u></p> <p>147. <u>Geography</u></p> <p>148. <u>Physical Education</u></p> <p>149. <u>Art</u></p> <p>150. <u>Music</u></p> <p>151. <u>Language</u></p> <p>152. <u>Computer Science</u></p> <p>153. <u>Business Studies</u></p> <p>154. <u>Health Education</u></p> <p>155. <u>Environmental Studies</u></p> <p>156. <u>Information Technology</u></p> <p>157. <u>Mathematics</u></p> <p>158. <u>Science</u></p> <p>159. <u>History</u></p> <p>160. <u>Geography</u></p> <p>161. <u>Physical Education</u></p> <p>162. <u>Art</u></p> <p>163. <u>Music</u></p> <p>164. <u>Language</u></p> <p>165. <u>Computer Science</u></p> <p>166. <u>Business Studies</u></p> <p>167. <u>Health Education</u></p> <p>168. <u>Environmental Studies</u></p> <p>169. <u>Information Technology</u></p> <p>170. <u>Mathematics</u></p> <p>171. <u>Science</u></p> <p>172. <u>History</u></p> <p>173. <u>Geography</u></p> <p>174. <u>Physical Education</u></p> <p>175. <u>Art</u></p> <p>176. <u>Music</u></p> <p>177. <u>Language</u></p> <p>178. <u>Computer Science</u></p> <p>179. <u>Business Studies</u></p> <p>180. <u>Health Education</u></p> <p>181. <u>Environmental Studies</u></p> <p>182. <u>Information Technology</u></p> <p>183. <u>Mathematics</u></p> <p>184. <u>Science</u></p> <p>185. <u>History</u></p> <p>186. <u>Geography</u></p> <p>187. <u>Physical Education</u></p> <p>188. <u>Art</u></p> <p>189. <u>Music</u></p> <p>190. <u>Language</u></p> <p>191. <u>Computer Science</u></p> <p>192. <u>Business Studies</u></p> <p>193. <u>Health Education</u></p> <p>194. <u>Environmental Studies</u></p> <p>195. <u>Information Technology</u></p> <p>196. <u>Mathematics</u></p> <p>197. <u>Science</u></p> <p>198. <u>History</u></p> <p>199. <u>Geography</u></p> <p>200. <u>Physical Education</u></p> <p>201. <u>Art</u></p> <p>202. <u>Music</u></p> <p>203. <u>Language</u></p> <p>204. <u>Computer Science</u></p> <p>205. <u>Business Studies</u></p> <p>206. <u>Health Education</u></p> <p>207. <u>Environmental Studies</u></p> <p>208. <u>Information Technology</u></p> <p>209. <u>Mathematics</u></p> <p>210. <u>Science</u></p> <p>211. <u>History</u></p> <p>212. <u>Geography</u></p> <p>213. <u>Physical Education</u></p> <p>214. <u>Art</u></p> <p>215. <u>Music</u></p> <p>216. <u>Language</u></p> <p>217. <u>Computer Science</u></p> <p>218. <u>Business Studies</u></p> <p>219. <u>Health Education</u></p> <p>220. <u>Environmental Studies</u></p> <p>221. <u>Information Technology</u></p> <p>222. <u>Mathematics</u></p> <p>223. <u>Science</u></p> <p>224. <u>History</u></p> <p>225. <u>Geography</u></p> <p>226. <u>Physical Education</u></p> <p>227. <u>Art</u></p> <p>228. <u>Music</u></p> <p>229. <u>Language</u></p> <p>230. <u>Computer Science</u></p> <p>231. <u>Business Studies</u></p> <p>232. <u>Health Education</u></p> <p>233. <u>Environmental Studies</u></p> <p>234. <u>Information Technology</u></p> <p>235. <u>Mathematics</u></p> <p>236. <u>Science</u></p> <p>237. <u>History</u></p> <p>238. <u>Geography</u></p> <p>239. <u>Physical Education</u></p> <p>240. <u>Art</u></p> <p>241. <u>Music</u></p> <p>242. <u>Language</u></p> <p>243. <u>Computer Science</u></p> <p>244. <u>Business Studies</u></p> <p>245. <u>Health Education</u></p> <p>246. <u>Environmental Studies</u></p> <p>247. <u>Information Technology</u></p> <p>248. <u>Mathematics</u></p> <p>249. <u>Science</u></p> <p>250. <u>History</u></p> <p>25</p>	

Grad. Cert. Graduate Certificate, either Nursing, Nursing Education or Education

Grad. Dip. Graduate Diploma, either Nursing, Nursing Education or Education.

Clinical	Clinical Experience
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Group A. Clinical Nurse Educators known by other titles.

Member	Competencies	Age / Gender (Demographic)	Highest Qualification / Education Course (Demographic)	Level of Responsibility Manager (Demographic)
1	Agree with all	30-39 / M	Diploma / College of Nursing	2-5 Wards / Manager of Area
2	Agree with all	30-39 / F	Degree / Nil	1 Ward / NUM
3	Disagree with 4/5/18	30 - 39 / F	Hospital / College of Nursing	5 plus Wards / NUM
4	Disagree with 11/15	30-39 / F	Hospital / Hospital	2-5 Wards / NUM
5	Disagree with 18	30-39 / F	Grad. Dip. / Hospital	Others / Manager Education
6	Agree with all	40-49 / F	Hospital / Hospital	2-5 Wards / Man. Area
7	Agree with all	30-39 / F	Degree / Hospital	5 plus Wards / DON
8	Agree with all	30-39 / M	Hospital / Hospital	5 plus Wards / Man. Area
9	Agree with all	21-30 / F	Masters / Hospital	5 plus Wards / NUM
10	Agree with all	30-39 / F	Degree / Nil	2-5 Wards / DDON

Group A. Clinical Nurse Educators known by other titles.

Member	Post Basic Certificate/ Tertiary Qualification (Pre Requisite)	Years of Clinical Experience (Pre Requisite)
1	Masters Degree	5 yrs Clinical
2	Post Basic Cert.	3 yrs Clinical
3	Post Basic Cert. / Bachelors	7 yrs Clinical
4	Post Basic Cert.	3 yrs Clinical
5	Post Basic Cert.	N/A
6	Post Basic Cert. / Grad. Dip.	5 yrs Clinical
7	Post Basic Cert. / Grad. Dip.	5 yrs Clinical
8	Post Basic Cert. / Grad. Dip.	5 yrs Clinical
9	Post Basic Cert.	7 yrs Clinical
10	Post Basic Cert. / Grad. Dip.	5 yrs Clinical

### ***Analysis of results from sub category A***

This group of clinical educators were known by a variety of titles in their workplace despite having clinical education of trained staff as their main role. The major items of interest in this groups' answers to the survey and demographics are discussed below:

#### **1. Competency Statements.**

In this group there were five competencies that scored a negative vote, 25% by the participants. These competencies were;

- competency 4, *maintains a high level of technological skill and understanding;*
- competency 5, *demonstrates knowledge of adult learning principles;*
- competency 11, *acts responsively to new and innovative ideas;*
- competency 15, *actively participates in relevant committees,*
- competency 18, *demonstrates ability to manage and resolve conflict.*

This is a high amount as there was only seven negative scores, 29%, against the competencies from all survey participants across all three groups. However one participant in this group scored three competencies negatively.

#### **2. Pre-requisites.**

In this group, nine participants, (90%) scored post basic certificates as being essential for the role of CNEs, yet only six, (60%) of them stated that a post graduate qualification was essential for the role.

#### **3. Clinical Experience**

Participants in this group scored between 3 to 7 years clinical experience as essential to the role of clinical educator. The majority of the participants, six or 60%, believed that 5 years clinical experience was essential. Two participants, 20%, believed 7 years experience was essential and two participants, 20%, believed that 3 years clinical experience was essential.

#### **4. Demographics**

The majority of participants, (80%), in this group were between the ages of 30 to 39. Participants in this group were divided into eight or 80% female and two or 20% male. Four participants, 40%, held a hospital based certificate as their highest nursing qualification and three, 30%, held a degree. All had attended education courses either at hospital or College level. 50% of participants, had worked in their current position for 1-2 years.

Six participants, or 60%, worked on between 2-5 or more wards. Eight or 80% answered to the NUM or to a manager of an area. All participants in this group were paid at Clinical Nurse Specialist Level.

#### **5. Overall Comments:**

This group appeared to find the most faults with the competency statements. This may be to the fact that because of their different work titles, the participants of this group may carry out other roles besides clinical education. The requirement for a post basic certificate was unexpected.

Once again it may be due in part to the fact that the members of this sub category due to their different titles, may actually carry out more a clinical role than a educational role. The amount of clinical experience was high. The demographic data show a diverse group working outside the NSW State Award, who are moderately well educated. It was also unexpected that only one person was responsible for the education in one ward as per the award structure.

It is perceived that due to the varied nature of the work of the participant in this group which may include a large amount of clinical work, the competency statement may not be completely suitable for them.

Group B. Clinical Nurse Educators working on one ward/unit.

Member	Competencies	Age / Gender (Demographic)	Highest Nursing Qualification / Education  Course Attended (Demographic)	Level of Responsibility and Direct Line  Management (Demographic)
11	Agree with all	40 - 49 / F	Grad Dip / Hospital	1 Ward / NUM
12	Agree with all	50 plus / F	Grad Dip / University	1 Ward / NUM
13	Agree with all	21 - 30 / M	Degree / College of Nursing	1 Ward / NUM
14	Agree with all	30 - 39 / F	Hospital / University	1 Ward / NUM
15	Agree with all	21 30 / F	Degree / College of Nursing	1 Ward / NUM
16	Agree with all	30 - 39 / M	Hospital / Nil	1 Ward / NUM
17	Agree with all	30 - 39 / F	Masters / College of Nursing	1 Ward / NUM
18	No data	No data	Non Returned Data	Non Returned Data
19	Agree with all	21 - 30 / F	Degree / University	1 Ward / NUM
20	Agree with all	21 - 30 / F	Diploma / Hospital	1 Ward / NUM

Group B. Clinical Nurse Educators working on one ward/unit.

Member	Post Basic Certificate / Tertiary Qualification (Pre Requisite)	Years of Clinical Experience (Pre Requisite)
11	Post Basic Cert / Grad Diploma	3 yrs Clinical Experience
12	Post Basic Cert / Grad Diploma	5 yrs Clinical Experience
13	Post Basic Cert / Grad Cert	5 yrs Clinical Experience
14	Post Basic Cert / Masters	3 yrs Clinical Experience
15	Bachelors / Grad. Cert.	3 yrs Clinical Experience
16	Post Basic Cert / Bachelors	Nil
17	Post Basic Cert	5 yrs Clinical Experience
18	Non returned data	
19	Post Basic Cert / Grad Dip	5 yrs Clinical Experience
20	Post Basic Cert / Grad Dip	7 yrs Clinical Experience



### ***Analysis of Results from Sub Category B***

This group of clinical educators worked only on one ward or unit as per the NSW Department of Health and NSW Nurses Association awards. Only nine participants from this sub group responded to the survey. Comments on their answers and demographic details are discussed below:

#### **1. Competency Statements**

This group found the competencies suitable to their workplace.

#### **2. Pre requisites**

Eight participants, 89%, in this group perceived that a post basic certificate was required for clinical educators. Eight participants, 89%, also perceived that post graduate education was required for the role of clinical educators.

#### **3. Clinical Experience**

Seven participants, 78% in this group perceived that between three to five years clinical experience was required for the role of the clinical educator. One participant, 11%, did not stipulate any years of experience and one participant, 11%, believed seven years experience was required.

#### **4. Demographics**

Seven participants, or 78% of this group were between 21-39 years old. The group consisted of seven females 78% and two males, 22%. Three participants, 33%, held a degree as their highest nursing qualification, two participants, (22%) held a graduate diploma and two participants, and (22%), held a hospital based certificate. The majority of participants, 89%, had attended education courses either at hospital or area level or at the NSW College of Nursing. Years of service in the present position were spread across the spectrum. All nine participants, 100%, educated only on one ward and all nine participants, 100%, answered to the Nursing Unit Manager. All participants in this group were paid at Clinical Nurse Specialty level.

#### **5. Overall Comments**

This group appeared to perceive the competencies suitable for their working needs. There was still a significant perceived need for specific post graduate courses which is more easily explained in this group as they work within one specialty only.

The perceived need for post graduate education in this group, was unexpected but may be reflective of the current movement in nursing. Demographically, it must be noted, that all participants had attended at least one course or program on education. An unexpected fact is that this is the only group that conformed to the award by working in only one ward and answering to the Nursing Unit Manager.

Group C. Clinical Nurse Educators working with a target population.

Member	Competencies	Age / Gender (Demographic)	Highest Nursing Qualification / Education Courses Attended (Demographic)	Level of Responsibility / Direct Line Management (Demographic)
21	Agree with all	40-49 / F	Degree / Hospital	2-5 Wards / Manager of Area
22	Disagree with 13	30-39 / M	Masters / Hospital	Cont. Ed. / Manager of Area
23	Agree with all	40-49 / F	Degree / University	Others / Manager of Education
24	Agree with all	21-30 / F	Degree / University	Graduates / SNM Employee Relations
25	Disagree with 24	40-49 / F	Hospital / University	TENs / DON
26	Agree with all	21-30 / M	Degree / Hospital	Hospital / DDON
27	Agree with all	21-30 / F	Degree / Hospital	TENs/ Manager of Area
28	Agree with all	40-39 / F	Hospital / University	TENs / Manager of Ed.
29	Agree with all	30-39 / F	Hospital / College of Nursing	Graduates / Manager of Ed.
30	Agree with all	40-49 / F	Hospital / Associate Diploma	TENs / Manager of Ed.

Group C. Clinical Nurse Educators working with a target population.

Member	Post Basic Cert. / Tertiary Qualifications (Pre Requisite)	Yrs of Clinical Experience (Pre Requisite)
21	Post Basic Cert. / Grad Dip.	5 yrs Clinical
22	Continuing Education	Nil
23	Post Basic Cert. / Grad Dip.	5 yrs Clinical
24	Post Basic Cert.	5 yrs Clinical
25	Bachelors / Grad. Cert.	5 yrs Clinical
26	Post Basic Cert. / Bachelors	5 yrs Clinical
27	Post Basic Cert. / Grad Dip.	5 yrs Clinical
28	Post Basic Cert. / Grad Cert.	5 yrs Clinical
29	Post Basic Cert.	5 yrs Clinical
30	Post Basic Cert.	Nil

## ***Analysis of Results from Sub Category C***

This group of clinical educators works with target populations such as the Trainee Enrolled Nurses or New Graduate Registered Nurses. They may even be responsible for the clinical education in a hospital. Comments from the survey participants on their answers and demographics area discussed below:

### **1. Competencies Statements**

This group generally found the competencies suitable to the workplace requirements, with only two people (7%), scoring two competency statements negatively in this group. The statements were:

- competency 13, *utilises resources effectively and efficiently;*
- competency 18, *demonstrates ability to manage and resolve conflict.*

### **2. Pre requisites**

Nine out of ten participants, 90%, perceived that a post basic certificate was essential for the role of clinical educator. This certificate could be tertiary or hospital based as is the present format in NSW. However, eight participants, (80%), perceived that tertiary education was essential for the role.

### **3. Clinical Experience**

Five years clinical experience was perceived by eight participants or 80% to be essential for the role of the Clinical educator.

### **4. Demographics**

Five participants (50%), in this group were aged between 40-49 years. Eight (80%), of the participants were females while two (20%), were males. Five participants (50%) held a nursing degree with four (40%) holding a hospital based certificate as their highest nursing qualification. All participants had attended at least one course on education. Years in there current position were spread across the spectrum. All ten members educated other groups or more than one ward. All ten, 100% answered to people beside a Nursing Unit Manager. Six participants (60%), were paid at Clinical Nurse Specialist level and four (40%), were paid at Nurse Educator level.

### **5. Overall Comments**

This group despite working outside the NSW Award, generally perceived that the competencies were suitable to them.

The survey participants' pre requisites were unexpected as nine participants, 90%, perceived specialty post graduate courses were essential to the role of the CNE, yet all participants were worked across different specialties. One participant (10%), stated that the only prerequisite he could ask for was evidence of continuing education.

This was a moderately well educated group who had attended courses on education. It should be noted that all participants in this group educated on more than one ward and answered to a senior nursing manager, outside the industrial nursing award. Four participants, or 40%, were not paid as clinical educators (CNS Wage) but were paid at nurse educator level, yet they still found the competencies statement an accurate reflection of their role.

#### ***4.12 Overall Analysis of Survey Data***

Twenty nine clinical educators returned surveys which translated to a 97% response rate.

Valuable feedback was also given after completion of the survey, where clinical educators stated that they were really pleased and heartened that someone was taking the time to research their role.

Only six competency statements (21%), received negative scores, with only one competency (4%), receiving two negative scores. The competencies that scored negative results were:

- competency 4, *maintains a high level of technological skill and understanding;*
- competency 5, *demonstrates knowledge of adult learning principles;*
- competency 11, *acts responsively to new and innovative ideas;*
- competency 13, *utilises resources effectively and efficiently;*
- competency 15, *actively participates in relevant committees;*
- competency 18, *demonstrates ability to manage and resolve conflict.*

This is a significant vote that the competency statements are a true reflection of what is required of a clinical educator when fulfilling their role. The majority, 86%, of negative comments came from group (A) who were educators known by other work titles. The pre requisite data was an amalgam of scores. A nursing degree was perceived as essential as was obtaining a post basic specialty course. Post graduate certificates (tertiary or hospital based) were seen as highly desirable as well as three to five years' clinical experience.

### 4.13 Comprehensive Competency List For CNE's

The following is a competency list generated from the survey and Delphi data. Minor word changes to the competency statements and elements have been made as well as major changes to the number of competencies.

- Competency 10, *demonstrates the ability to link theory with practice*, was joined to competency nine as a result of comments from the survey participants.
- Competency, *responds to new and innovative ideas*, was joined with all competencies due to comments from the survey participants.
- Competency 18, *demonstrates ability to manage and resolve conflict*, was removed as a result of two negative scores from the survey participants.

A short list of pre requisites is included at the end of the competency statements.

#### Clinical Domain

##### **Competency 1 Demonstrates clinical expertise and a comprehensive knowledge of nursing care.**

**Verbal Description** Demonstrates an understanding of various aspects of clinical nursing care, and has an accurate and recent knowledge of nursing issues, clinical care, relevant medical, nursing and allied health interventions.

**Elements**

- A) Respected by peers within the clinical area to be clinically credible.
- B) Delivers a high standard of nursing care, which is research, based.
- C) Utilises expert nursing knowledge and practice as a basis for teaching.

##### **Competency 2 Demonstrates an accurate and comprehensive knowledge of nursing policies, practices and standards, particular to the area in which they are educating.**

**Verbal Description** Possess knowledge of hospital and ward policies and standards of practice. Is able to then teach these practices to new staff.

**Elements**

- A) Is familiar with hospital policies for clinical care, i.e. telephone orders.
- B) Is familiar with new emerging nursing policies.
- C) Assists with the development of research based policies and procedures.

##### **Competency 3 Demonstrates role model /mentor characteristics.**

**Verbal Description** Acts as a professional and clinical role model to other staff.

**Elements**

- A) Acts as a positive role model.
- B) Acts as a staff / patient advocate.
- C) Questions treatment / interventions of patients as appropriate.

<b>Competency 4</b>	<b>Maintains a high level of technological skill and understanding.</b>
<i>Verbal Description</i>	Has knowledge and an understanding of technology.
<i>Elements</i>	<p>A) Actively seeks updates on new technology.</p> <p>B) Has a high level of technological know how.</p>

## **Education Domain**

**Competency 5 Demonstrates a knowledge and understanding of adult learning principles.**

<i>Verbal Description</i>	Uses the principles of adult learning to provide educational support to staff.
<i>Elements</i>	<p>A) Understands how an adult learns and the adult learning process.</p> <p>B) Understands the possible causes of learning difficulties in an adult.</p> <p>C) Motivates staff to be self directed, seeking learning opportunities.</p>

**Competency 6 Applies educational strategies to assess individuals and groups.**

<i>Verbal Description</i>	Uses acceptable professional standards of practice to assess the competence of staff members, and to identify skill deficits.
<i>Elements</i>	<p>A) Completes formal assessments of staff members as required.</p> <p>B) Assesses clinical skills of individuals of a regular basis.</p> <p>C) Has the ability to assess for prior knowledge and to identify deficits of knowledge and skills.</p>

**Competency 7 Develops, implements and evaluates planned educational programs within the clinical area.**

<i>Verbal Description</i>	Plans and develops specific clinical educational programs and implements these within the clinical area as appropriate.
<i>Elements</i>	<p>A) Implements education programs as required and as appropriate, ie regular inservice.</p> <p>B) Implements changes in educational programs on the basis of feedback.</p> <p>C) Prepares for future developments within the ward and the organisation through planned education events.</p>

**Competency 8 Provides effective and constructive feedback to learners, peers and other stakeholders.**

<i>Verbal Description</i>	Monitors learners' progress and provides feedback at appropriate times, this may be critical or positive feedback.
<i>Elements</i>	<p>A) Liaises with clinical preceptors as to staff's progress.</p> <p>B) Gives feedback, written and verbal, on procedures or skills carried out.</p> <p>C) Liases with the Nursing Unit Manager regarding educational deficits of staff.</p>



**Competency 9****Engages effectively in clinical teaching.****Verbal Description**

Uses appropriate methods to teach in the clinical field and has the ability to differentiate the need to educate on an individual level, or on a group level, as appropriate.

**Elements**

- A) Has the ability to link theory with clinical practice.
- B) Has the ability to capture the moment and seek potential learning opportunities.
- C) Uses a variety of teaching resources, i.e. videos / overheads / clients to suit the situation.

## **Management Domain**

**Competency 10****Effectively plans and prioritizes education.****Verbal Description**

Plans educational events, and their prioritises them in order of significance to the ward / unit.

**Elements**

- A) Develops specific goals and strategies for educational events.
- B) Sets priorities for education with manager.
- C) Has an understanding of the clinical context in which education takes place and the limitation of the clinical area.

**Competency 11****Utilises resources effectively and efficiently.****Verbal Description**

Uses human, environmental and educational resources to facilitate education.

**Elements**

- A) Encourages uses of the appropriate resources.
- B) Accesses the correct personnel for reference and consults with expert nurses /practitioners.
- C) Has a knowledge of budgetary allocations within the area.

**Competency 12****Maintains accurate records and documentation.****Verbal Description**

Maintains accurate records and documentation of all personnel, and ward educational practices.

**Elements**

- A) Prepares appropriate reports for major stakeholders.
- B) Maintains an in-service record.
- C) Keeps records of teaching events.

**Competency 13****Actively participates in relevant committees.****Verbal Description**

Is an active member of appropriate committees as required by the ward / unit.

**Elements**

- A) Represents the ward / unit on the hospital education committee.
- B) Reports to the ward / unit of committee involvement.
- C) Represents the ward / unit on other committees as appropriate.

## Interpersonal Domain

### Competency 14

**Communicates effectively and appropriately.**

#### *Verbal Description*

Uses effective communications skills with both clients and staff.

#### *Elements*

- A) Communicates at an appropriate level - both in verbal and written form.
- B) Has the ability to communicate with management.
- C) Has the ability to communicate knowledge and skills to other staff members.

## Professional Domain

### Competency 15

**Maintains and updates personal professional development**

#### *Verbal Description*

Demonstrates a commitment to personal and professional development.

#### *Elements*

- A) Attends conferences and seminars in area of expertise.
- B) Participates actively within professional organisations.
- C) Displays a commitment to personal ongoing education.

### Competency 16

**Demonstrates a professional attitude.**

#### *Verbal Description*

At all times is professional in manner and attitude.

#### *Elements*

- A) Displays ethical behavior.
- B) Maintains confidentiality at all times.

### Competency 17

**Actively encourages and promotes the professional development of other staff members.**

#### *Verbal Description*

Acts to enhance the professional development of all other nurses.

#### *Elements*

- A) Encourages membership of professional organisations.
- B) Gives appropriate career advice.

## Professional Domain

### Competency 18

**Engages in reflective practice.**

#### *Verbal Description*

Assesses own abilities independently, comprehensively and accurately.

#### *Elements*

- A) Uses reflective practice to enhance own performance.
- B) Uses reflective practice to initiate change in the clinical area.
- C) Uses reflective practices as a teaching strategy.

<b>Competency 19</b>	<b>Demonstrates knowledge of nursing research.</b>
<b>Verbal Description</b>	Possess knowledge of research methodologies and current nursing research specific to area of practice.
<b>Elements</b>	<p>A) Critiques relevant literature, both clinical and educational.</p> <p>B) Identifies problems / issues within nursing practice which may be resolved by nursing research.</p>
<b>Competency 20</b>	<b>Incorporates research into all areas of practice.</b>
<b>Verbal Description</b>	Incorporates new knowledge gleaned from research into clinical / educational practice.
<b>Elements</b>	<p>A) Suggests changes to nursing practice on the basis of research findings.</p> <p>B) Participates in research projects to validate new ideas / practices.</p> <p>C) Initiates small nursing research projects within the clinical area.</p>

#### ***4.14 Comprehensive List of Pre Requisites***

Below is a comprehensive list of pre requisites generated from the survey and Delphi data.

1. Registered Nurse
2. Evidence of Continuing Education
3. Post Basic Certificate in Area of Specialty (tertiary or hospital based)
4. Post Graduate Certificate - Nursing Education
- or
5. Post Graduate Diploma - Education
6. 3 - 5 years clinical experience

# CHAPTER FIVE

## Discussion of Results

### ***5.0 Introduction***

The clinical area for nursing has always had a pivotal educational role for both undergraduate and qualified nurses. The clinical area is where nurses learn the art of nursing or the practice of nursing, such as caring for the psychosocial needs of a client or their hygiene needs. It is also in the clinical area that nurses integrate their theoretical knowledge, or science into practice (DHSS 1972; UKCC 1982; Wyatt 1978 cited in Jones 1985, p. 349). The following discussion chapter will reiterate the major components of the CNE research study and discuss the dominant findings. A CNE, for the purpose of this study, was defined as ‘a nurse employed by a facility to carry out clinical teaching and/or coordinate clinical teaching activities. They are employed solely for this purpose’. This definition excluded clinical facilitators employed by universities and other educational bodies to support students of nursing in the clinical area.

This chapter is divided into the following sections:

1. How the research findings relate to the literature;
2. How the research findings relate to the competency movement;
3. The significant differences between the job advertisements/descriptions with the competencies generated by the research;
4. Conclusion

Section one discusses how the CNE research findings relate to the literature reviewed. Section two outlines how the research findings relate to the competency movement and section three examines the significant differences between the job advertisements and descriptions with the competencies generated by the research study. Section four concludes the chapter.

The CNE research project has clearly established that the role of the CNE in NSW was not previously defined or delineated from other nursing roles. A definition of the CNE role has been created by this research study through the generation of 21 competencies and six pre requisites required of an individual to fulfill the role of the CNE.

## ***5.1 How the Research Findings Relate to the Literature***

There was no literature found on the specific role of the CNE in NSW, Australia. Therefore, the research findings specific to NSW cannot be related directly back to the literature. However, the research findings can be linked to literature on the role of clinical educators in other countries and literature on competencies, role theory and the job advertisements and descriptions of Clinical Nurse Educators that were reviewed.

It must be noted here that literature on the role of the Clinical Facilitator [CF] was reviewed. The CF is responsible for the clinical education of the student of nursing in the clinical area.

Research on this role has been steadily growing over the last decade. Yet to date, there is no research on the role of the CNE, who is responsible for education of registered and enrolled nurses in the clinical setting. One reason for this may be that currently, nursing academics are the main nursing researchers in Australia and internationally and the main clinical education contact that academics have is with CFs not CNEs.

In 1989 Clifford (p.16) stated that ‘one of the biggest weaknesses within our system of nurses’ education is the lack of clarity about the clinical teaching role.’ This lack of clarity occurred in the 1960’s when the role commenced in Australia and continues to occur in 1997. The CNE research findings clearly support this assertion.

One finding of the research study was that different work titles are used to describe the individuals who carry out the role of the clinical nurse educator. Eleven different titles were used in this study. These different titles added to the lack of clarity of the CNE role by the incumbents and their colleagues. The competencies generated by the research study were not as appropriate for this group (who possessed different work titles) as they were for the other two sub categories. This group with different titles recorded 25% of negative scores, the largest percentage of any group. This is due to the role being extremely unclear for this group, as they are clinical nurse educators but do not comply with the NSW State award, instead their role is decided by their managers and themselves on an ad hoc basis.

The education of nurses, and specific education roles in nursing, both in the clinical arena and in the classroom have been described since the late 1800’s. Education in the classroom area, has been the main focus of discussion and analysis by nursing researchers and academics until the 1950’s when education in the clinical area began to be perceived as an area of concern (Mapp 1982, p. 60).

The need for improvement in the area of clinical education for student nurses and registered nurses became apparent in Australia in the 1960's (Russell 1990, p. 67). This resulted in the role of clinical instructor or educator being introduced in addition to the sister tutor, whose domain was the classroom (Russell 1990, p. 67). Prior to the introduction of the clinical educators role, clinical education was the responsibility of the ward sister and was undertaken by ward based staff or interested doctors (Russell, 1990 p. 67).

The role of the clinical educator has never been clearly defined or delineated from other ward based nursing roles, in either Australia, or internationally. This is proven conclusively in the literature. The UK abandoned the role of the clinical teacher (educator) in the 1980's due to problems that occurred with the role. These problems could be directly related to the lack of definition of the role (Clifford 1989; Bolger 1985; & Smyth 1988).

Job advertisements and descriptions that were reviewed as part of the CNE research study add weight to the argument that the role of the clinical educator is not defined. Each hospital appeared to define the role of the clinical educator to suit their needs. Items such as 'assists in maintaining morale of staff' (Appendix 2) which are not part of any state award appeared in a clinical educators job description. Other items that appeared to be added in response to individual hospitals needs included, 'undertakes research', 'ensure quality activities are undertaken', 'teaches in locally run courses' and 'undertakes patient care' (Appendix 2). The NSW state industrial award for public hospital Registered Nurses has no provision for stating essential or desirable qualifications or experience for the CNE role. Nevertheless individual job advertisements requested specific clinical experience, post basic qualifications and tertiary qualifications (Appendix 1).

The main premise of role theory, the theory used as the framework for the CNE research study, is that an individual must have a clear idea about what is required of them in order to function in their work or social circumstances adequately (Gerrish 1990; Bull & Hart 1995; Hardy & Conway 1988). Without a clear view of what is expected of them by their managers and peers the individual within a role may flounder and not adequately fulfill that role. Gerrish (1990, p.20), further states, that if the expectations and perceptions of both the role holder and the significant stakeholders within a facility do not match, then role ambiguity will occur. Role ambiguity can lead to work related stress, role conflict and decreased work performance and productivity.

Other problems that may occur if a role is not defined include role conflict, role strain and role incompetence (Hardy & Conway 1988). Role ambiguity and related problems impacted on the survey participants within this study. Comments from survey participants included: 'their role did not fit the NSW state award'; 'a large part of my job is to conduct research which is not part of the CNE award'; and 'teaching in graduate diplomas is a large part of my role' (Survey comments, chapter 4). All these activities fall outside the NSW state award and in the majority of cases outside the CNEs current job descriptions.

The members of the Delphi panel expressed comments that give the impression that the role of the CNE is not clear to them, or was perceived very differently from the NSW state award role. Items such as: 'manages financial resources'; 'teaches in the classroom'; and 'conducts research' are outside the NSW state award realm (Chapter 4).

Duffield (a, 1989, p. 16) considers that 'a role can be delineated and defined by identifying skills or competencies which are expected of people within that role'. The methodology of identifying competencies to delineate and define a role was utilised for the CNE research study. Areas of expertise or domains of practice required by any nurse teaching in the clinical area were identified from the literature. The domains of practice identified were: clinical expertise; educational ability; managerial skills; interpersonal skills; and professionalism. These domains of practice were used in both the Delphi rounds and in the survey. All comments given by both panel members and survey participants fitted easily into the five domains, with the one domain of reflective practice being created. This detail supports the literature that these domains of practice were essential for any nurse teaching in the clinical area.

In the first Delphi round the panel members were requested to write the competencies that they perceived were necessary for an individual to fulfill the CNE role. A wide variation of competencies were gained from the panel members, with 41 major themes being identified. This highlighted that the experts could not initially agree on what was required to fulfill the role of CNE. The literature clearly supports this assertion, as it is not clear in the literature what the competencies required of a clinical educator are because the role has never been clearly defined. It was however evident that the expert panel members agreed that the role of the CNE was an educational role, with the most comments (85) and themes (14) being generated in this domain of practice. Literature reviewed from Woods 1987, Russell 1990; Hinchliff 1987; & Morgan & Warbinek 1994 support this premise.

In the second round of the Delphi, the expert panel members were required to rank the competency statements generated from the 1st round. The majority of the competencies, 88%, gained consensus from the panel. Comments from the expert panel members and the survey participants support the literature's assertion that the role of the clinical educator is not sought after or well respected by peers and colleagues in nursing. An example by an expert panel member 'I expect a high standard from this person. In reality it is a position not eagerly sought, poorly paid and not well supported. One day nurses will recognise that it is the clinical educators who teach nursing, all other nurse educators merely try'. (Chapter 4)

Examples from CNEs include: 'Need to be respected by peers'; 'with the responsibility and the added stresses involved in being a CNE, the CNE should be entitled to a higher wage'; 'CNEs as a group are grossly over utilised and under paid and the list of competencies listed seem to fall outside the boundaries listed in the award for the CNE' (Chapter 4). Authors such as Clifford (1989); Karuhije (1986); Symth (1987); & Martin & Wright (1993), assert that clinical teaching is not considered prestigious by members of the nursing profession, and is often regarded as having a lower status than that of classroom teaching.

## ***5.2 How the Research Findings Relate to the Competency Movement***

The nursing profession commenced research into beginning practitioner competencies in 1986. This was a forward and preemptive step for nursing, as other professions in Australia, such as Law and Medicine, did not enter into the competency arena until 1989. Since 1986, various associations within the nursing profession have commenced work on developing competencies to identify specialised and advanced nursing practice. These bodies include the Australian Nurse Teachers Society Inc., The Confederation of Australian Critical Care Nurses Inc., and The Australian Nurses Federation in conjunction with the National Nurses Organisations.

The most relevant of these advanced competencies to the CNE research study is the work undertaken by the Australian Nurse Teachers Society in 1994/5. In 1994 ANTS commenced work on developing a set of competencies for all nurse teachers in Australia. In 1995, a set of competencies were published, but they have yet to be validated in the workplace.

The ANTS competencies differ greatly from the CNE competencies. The ANTS competencies were generated for a very broad and diverse group of nurse teachers who ranged from a CNE to a professor of nursing. The CNE competencies were generated for only one specific group of nurses, educators who teach in the clinical area.



There are eleven ANTS competencies, while there are 21 CNE competencies. This may be due to the differing methodologies used to generate the competencies. ANTS used a single group of individuals to generate the competencies, while the CNE competencies were generated by a panel of experts and then validated and assessed by practicing CNEs. The methodology used in the CNE study allowed a wider group of stakeholders to give comment to the creation of competency statements.

This research aimed to develop competency statements that were applicable to the specific role of CNE. The 21 competency statements regarding the CNE are applicable to the role of the CNE due to the fact that practicing clinical educators assessed the competencies and validated them in the workplace. The competencies generated in the CNE research study have similar components not only to the ANTS competencies but also to the ANCI competency statements. Items such as 'engages in reflective practice' is an ANCI competency statement and a CNE competency statement. Reflective practice can be a beginning competency as well as an advanced competency depending on the level practiced. An ANTS competency statement such as 'demonstrates expert nursing knowledge and practice as a basis for effective teaching' is very similar to 'demonstrates clinical expertise and a comprehensive knowledge of nursing care' found in the CNE competency statements.

Parkes (1991, p. 12), stated that the process of identifying, validating and documenting nursing competencies gave nurses the opportunity to value their work and to value the people who carry out that work. The CNE research has given CNEs a voice, and an opportunity to describe what is their exact role. A role that is not well known to other nurses and is not well articulated in nursing literature. Andrews (1993, p. 14), recommended that all specialties within nursing develop competency statements to demonstrate the complexity of their role and to influence the skill mix of personnel employed in their area. This is true for CNEs who need to demonstrate to the nursing profession that clinical teaching is different from classroom teaching and therefore requires a different set of competencies.

### ***5.3 The Significant Differences Between the Job descriptions & Advertisements and the CNE Competencies Generated***

The researcher in this study reviewed eight job advertisements and descriptions. Each job advertisement and description differed moderately from the list of 21 competencies generated in this research project. 15% of job advertisements and descriptions included client care, which the competency statements do not.

Other areas where the advertisements and descriptions differ from the competencies are in their generic basis. The descriptions and advertisements describe the CNE as a generic practitioner, where the CNE competencies are very specific to the role of an educator working in the clinical area. There are however many similarities between the advertisements and descriptions and the competency statements. The job advertisement and descriptions were for CNEs working in different areas such as on a ward or throughout a hospital. The competencies generated allow for this difference. Qualifications required such as tertiary education and a post basic specialty, were also described in the list of pre requisites.

## **5.4 Conclusion**

The panel members were all considered experts by the nursing profession. This status of experts was awarded to them by their professional role. It is interesting to note that despite this expertise not one member of the panel possessed a Ph.D. The highest academic award was a Master's Degree. None of the survey participants also held a Ph.D. but three did hold a Master's Degree. However, two of the survey participants had not even attended educational courses, but all members, Delphi panel and survey participants alike, expected CNEs to have a high level of knowledge regarding clinical issues, educational issues and nursing research. It is also interesting to note that of the 29 CNEs surveyed, 66% currently worked outside the NSW state award for CNE. This group expressed dissatisfaction with their role and the lack of definition of the role.

The competencies generated by the expert panel included such items as a 'positive manner' and 'a good appearance.' It was not unexpected that these items were not rated highly and were removed prior to the survey stage of the research. The pre requisites generated by the expert panel were similar to that agreed to by the survey panel.

Overall the 20 competencies and six pre-requisites that were finally generated by the panel and survey participants were representative of what is desired for the role of the CNE. They however do not represent what is occurring at this current time.

# CHAPTER SIX

## Conclusion

### **6.0 Introduction**

The following chapter will conclude the thesis. The chapter will connect the research process with the research results. The chapter is divided into the following sections:

1. Limitations of the research study
2. Risks versus benefits of the study
3. What the research study established
4. Did the research answer the research questions?
5. Overview of thesis chapters
6. Recommended future research projects

Section one overviews all the perceived limitations of the study. Section two examines the risks of the research study versus the benefits of the study. Section three explains what the research study actually established. Section four questions if the research study actually answered all four research questions that were posed prior to the study being undertaken and section five gives a comprehensive overview of the six main thesis chapters. Section six concludes the chapter by proposing future related research projects.

### **6.1 Limitations of the Research Study**

#### ***Sampling***

The Delphi panel members were chosen for their expert status within nursing and nursing education. The definition of an expert in this study, Appendix 3, was generated by the researcher and consisted of not only, the panel members frequent and regular association with CNEs, but also their acknowledged expert status within nursing in NSW. All 20 members of the panel fitted the criteria generated.

Duffield states ‘if a panel is chosen from a homogeneous background, then ten or twenty panel members may be sufficient’ (1989, p. 17). The selection of the experts was through a purposive sample method, which meant that they were all from a similar and therefore homogeneous background.

Thirty survey participants were selected to partake in the second stage of the research study. The survey participants were selected from three groups that had been identified from the job advertisements and descriptions that were analysed. The three groups were: CNEs known by other work titles; CNEs working on one ward/unit and CNEs working with a target population. Each group was to comprise of ten members, or 33% of the sample size. CNEs were selected after the researcher spoke to the Director of Nursing at seven large hospitals. Hence quota and purposive sampling was used for the survey. The main limitation with these types of sampling is that, they are not random sampling methods and hence biases may enter into the sampling (LoBiondo-Wood & Haber 1994, p. 291). However, purposive sampling was required for this study due to the use of the Delphi technique. This methodology requires a panel of experts to be identified prior to inclusion in the research. The participating CNEs in the survey also required purposive sampling to be utilised, as no data base is kept of individuals who practice as CNEs in NSW, hence the researcher was unable to randomly select CNEs. Quota sampling was utilised in the survey, because three specific sub categories were identified from the job advertisements and descriptions. To ensure equal representation of the three sub categories, quotas were required.

The main limitation with the sampling, was selecting the CNEs to be part of the survey. Due to a lack of uniform titles and job descriptions it was difficult to ascertain who actually was a CNE and who did clinical education as part of another position. This limitation was overcome by speaking with the Directors of Nursing at the hospitals, and setting criteria for inclusion in the CNE survey (Appendix 6).

### ***Workload of The Expert Panel and The Survey Participants***

The expert panel were given the largest workload of the two groups. In the first Delphi round, the panel were required to write competencies that they perceived were necessary to fulfill the CNE role. Comments were received from members of the panel that this took a moderate amount of time and effort. A 75% response rate was received which may indicate that a small percentage of the panel members believed the workload was too great. The first Delphi round was designed in this manner due to the lack of a comprehensive list of competencies for CNEs.

In the second Delphi round the panel members were only required to circle numbers, and make comment if they felt it necessary. The second round received a 97% response rate. This may indicate that due to the decreased workload more panel members were willing to respond.

The survey participants were given a minimum amount of work. The participants were required to fill out an extensive demographic form, but were only required to tick boxes next to each statement. The main body of the survey also required the survey participant to tick a box next to each competency statement, with space given for comments. A large percentage of survey participants did comment on the competency statements listed. A 97% response rate was achieved with the survey, which indicates the workload was not excessive.

### ***Limitations of Delphi Round and Survey Booklets***

After review of both the Delphi rounds and the survey booklets, minor changes could have been made to improve the terminology and the layout of both forms. These changes would include: the reduction in specificity in the element section which caused some confusion with participants; more space given for comment; and clearer guidelines in the demographic questions.

In competency statement number 15, regarding membership of committees, one of the elements was very specific and created confusion for participants. The element stated that the CNE should be a member of the resuscitation committee, which is not relevant to all CNEs. This element should not have appeared.

Area for comments was also limited. Participants often wrote on the back of booklets and on extra sheets. Demographic questions for both the survey participants and panel members were filled out incorrectly by a small minority. Instead of ticking just one box, a participant may have ticked two or three boxes for one question, which made analysis difficult. The demographic questions given to the survey participants were not correlated with the pre requisite questions. This made comparisons difficult. It would have been interesting to accurately compare the list of pre requisites generated by the survey participants with their own demographic data. Crude statistic analysis indicates that the majority of CNEs believed it was necessary for a CNE to hold a post graduate tertiary qualification, yet a significant number of CNEs appear not to hold such a qualification themselves.

### ***Limitation of the Pre Requisites***

The pre requisite list was generated from the comments made in the first round of the Delphi. This list was then used in the second round where the panel members were requested to rank each pre requisite according to its level of significance to the role of the CNE. The list was extensive and may have caused some confusion due to its length. The panel members were also not required to give a reason why they had chosen one pre requisite over another. Therefore there is no explanation as to why certain pre requisites were chosen such as three to five years experience versus five to seven years experience. After some modification due to comments, the pre requisite list was presented to the survey participants for them to agree or disagree if they believed the pre requisite was essential to the role of the CNE. Once again no comments were required or given as to why certain pre requisites were chosen over others.

### ***Other Limitations of The Project***

There were other minor problems with the research study.

1. The research study was only conducted in NSW because the CNE award is only a state based award. Further studies should encompass other states of Australia.
2. The research study was only conducted in large public hospitals. No rural, remote or private hospitals were used in the study. The main reasons for this were ease of access, and a belief that in smaller, private and rural hospitals nursing roles are often more blurred and less defined due to the smaller number of nurses that are employed. This belief was confirmed when reviewing job advertisements. In rural hospitals especially, clinical education was seen as a role taken on by managers and other nursing staff.
3. Thirty CNEs were chosen as a random number of CNEs for the survey. It is unknown what percentage this is of the CNE population in NSW as no figures are kept of how many CNEs are employed.

## ***6.2 Risks Versus Benefits of The Study***

The research study is perceived by the author and the participants as a valuable exercise that assisted in determining the role of the CNE within NSW. Various participants from the panel experts and the survey commented both on the forms and verbally to the researcher that they would like the role of the CNE defined and delineated from all other nursing roles.

Through defining the role of the CNE the research study assisted in ensuring that this important position is valued by other members of the profession and is recognised as a worthwhile and productive nursing role. The research also added to the ongoing debate about roles in nursing and the importance of the clinical area to nursing education.

The findings of the research have been used by ANTS (NSW) to prepare a submission to the NSW Nurses Association [NSWNA] regarding the wage scale of the CNE. At this present time the NSWNA is considering changes to the award to ensure the CNE is paid at an appropriate level.

The risks of the study were considered negligible as all ethical considerations had been taken into account.

### ***6.3 What the Research Study Established***

The identification and validation of competencies was the major objective of the CNE research study. Through the generation and validation of competencies for the CNE, the role of the CNE has been defined and delineated from other nursing roles.

The CNE research supported the anecdotal evidence as well as the published literature, that the role of the CNE is not defined and/or delineated from other nursing roles. This role has for the past several decades been open to personal interpretation by both managers and incumbents. It was evident, not only from the practicing CNE but also from the expert panel members, that nurses have high expectations of this role but are unclear about the precise aim or objective of the role. Competency statements generated by the panel of experts such as 'conducts nursing research' and 'looks after the ward budget' led the researcher to believe that many nursing experts believe this role is the panacea for all things in nursing that are currently not being undertaken by other roles.

The resultant list of 21 competencies can be used as a concise list of performance standards for CNEs within NSW. The competency statements generated in this research are core competencies for CNEs, and are specific to this role. The six pre requisites determined by the research are also a concise list of essential criteria for a CNE position, which may be used to assist when selecting individuals for the role.

This list of competencies will assist in explicitly defining the role of the CNE within NSW. Presently, there is a state award and a Trade Union statement regarding the CNE role. However this research has clearly demonstrated that the majority of CNEs surveyed, if not all, work outside the award regulations and are performing at a much higher level than is outlined in the award. The list of competencies generated by the research is in clear and concise language that can be understood by clinicians and managers alike. The competencies are broken down into domains, which will assist with performance appraisals and standards. The competencies are also assessable and have been validated in the workplace by practicing CNEs.

The pre requisites generated are also in clear and concise terms that are easily understood by clinical educators and managers. The list is in tune with nursing education today, with one post graduate tertiary qualification included and a minimum of three to five years clinical experience. The major area of concern for the researcher is the inclusion of a post basic certificate in an area of specialty however, both the panel of experts and the CNEs perceived this was essential to the role.

#### ***6.4 Did the Research Answer the Research Questions?***

Four major research questions were posed prior to the CNE research project commencing. These questions were

1. What are the significant competencies required of an individual to fulfill the role of the CNE, as perceived by major stakeholders involved in the CNE role?
2. Would a sample group of stakeholders be able to agree upon a list of significant competencies for this role?
3. Will this list of competencies be agreed upon by a group of practicing clinical nurse educators?
4. Will the competencies offer an accurate reflection of the role of the CNE in NSW?

Question one has been answered unequivocally by the CNE research project. A comprehensive list of 21 competencies has been created by the research project. Major stakeholders such as managers, educators and practicing CNEs have participated in the research project and have help create this comprehensive list .

Question two has also been answered in the affirmative. The major stakeholders agreed upon a list of 21 competencies, however this agreement was not unanimous for all competencies.



It is perceived by the researcher that 100% agreement would not occur when researching the perceived views of stakeholders as each individual stakeholder has a different perspective. As only two rounds of the Delphi was used in this project total agreement was also not reached. It was perceived that it would take many more rounds of the Delphi to reach further agreement amongst the expert panel. Time did not permit this.

Question three was also answered unequivocally by the research study. All 29 CNEs surveyed agreed on the majority of the competencies. Only a small number of competencies, seven in total actually recorded disagreement.

Question four can not be answered unequivocally by this project. The researcher perceives that competencies and prerequisites created by this project do accurately reflect the role of the CNE in NSW, as all the major stakeholders and practicing CNEs were involved in the study. However this question will only be answered by the competencies and pre requisites being used in the workforce to create job descriptions and performance appraisals for CNEs. Further research may also answer this question.

## ***6.5 Summary of Thesis Chapters***

Chapter one was the introductory chapter to the research study and thesis. This chapter outlined the background to the research study and identified key research questions. The significance of the study and where the study was set were also discussed in this chapter. Chapter two was an extensive review of all relevant literature. Major topics of literature reviewed included: Nurse education; nursing as a practice based discipline; why clinical education is so important; an international analysis of clinical teaching in nursing; role theory; competency movement and the creation of domains of practice.

Chapter three was the methodology and ethical consideration chapter. This chapter described the different methodologies used within the research study. Research design and types of analysis used in the research study were also outlined. The process of the research from the creation of domains of practice through to the survey questionnaire design were examined. The ethical considerations involved in the study are also discussed in this chapter. Areas such as the target population, sampling methodology, bias and control and the major issues of reliability and validity were also outlined in this chapter.

Chapter four described in detail the data analysis and findings of both the Delphi rounds and the Survey. Sections in this chapter included: the pilot studies findings; demographic data analysis of both the members of the Delphi expert panel and the survey participants; analysis of data from round one and two of the Delphi; analysis of data collected from the survey participants and the final list of competencies and pre requisites generated by the research study.

Chapter five in the thesis discussed the findings of the research study and how the findings related to the literature and the competency movement. Job advertisements and descriptions were re examined in light of the research study findings. Limitations of the research study and the risks Vs benefits of the study were outlined in chapter six, the final chapter. The chapter concludes with recommendations for future research studies.

## ***6.6 Recommended Future Research Projects***

Cameron (1989, cited in Gray & Pratt eds., p. 222), stated that ‘ongoing revision of the competencies is required in order to ensure that they continue to be valid statements accurately reflecting the nature of nursing practice.’ All competencies, once generated, need to be validated and then re validated to ensure that they accurately reflect the very nature of the work for which they have been generated. Therefore re validation of the competency statements generated for CNE’s is an important and essential future research project to be pursued.

Cameron (1989 cited in Gray & Pratt eds., p. 222) further states that ‘in order to be valid (competency) statements, it will be necessary for this ongoing revision to be based on actual observation of nursing practice.’ This statement clearly demonstrates that ongoing revision or revalidation of competency statements may be undertaken using different methodologies such as participant observation or in-depth interviewing to gain a different perspective.

An extension of this research study could also be, the use of assessment of CNE using the competency statements. This research project would examine how the competencies could be used assessing a CNE and their performance. Devising assessment tools using the competency statements would be extremely beneficial to the profession and CNEs alike.

Another major research study that could flow from this project is a study examining the use of different competency statements generated by the nursing profession.

There are now many different types of competencies ranging from the ANCI beginning practitioner statements to the yet to be created advanced practice statements. This author perceives that members of the profession have limited knowledge and appreciation of the competencies. It is also perceived that the profession is not using the competencies. It is also perceived that there is a general lack of knowledge by members of the nursing profession regarding what constitutes a competency and what is not a competency. This was highlighted in the CNE research study by both the experts and the practicing CNEs including personal attributes such as grooming and confident manner into their list of competency statements.

## REFERENCE LIST

Alexander, M. 1982, 'Integrating Theory and Practice in Nursing', Part 1. Occasional Papers *Nursing Times*, vol. 78, no. 17, pp. 65-68.

Alexander, M. 1982, 'Integrating Theory and Practice in Nursing', Part 2. Occasional Papers *Nursing Times*, vol. 78, no. 18, pp. 69-71.

Andrews, J. 1993, 'Specialisation and Competency Standards Issues & Development'. *Australian Critical Care*, vol. 6, no. 1, pp. 13-15.

Andrews, J. 1996, 'State of Play or Where are We at and Where to Now?' *Nursing Matters*, vol. 9, p. 10.

Australian Nursing Council Inc. 1996, Newsletter, no. 10, pp. 6-9

Australian Nursing Council Inc. 1990. 'Australian Nurses Registration Authority Conference Nursing Competencies Assessment Project', pp. 1-3.

Australian Nursing Council Inc. 1990, *National Competencies for RN's and EN's in Recommended Domains*. ANCI Press, Canberra, Australia.

Australian Nurse Registering Authorities Conference. 1993, 'Nursing Competencies Assessment Project', pp 1-3.

Australian Nurse Teacher Society Inc. 1994, 'Competency Statements', *The Bulletin*, Spring, pp. 1-6

Australian Nurse Teachers Society Inc. 1995, History of ANTS', *The Bulletin*, Winter, pp. 1-2.

Benner, P. 1984, *From Novice to Expert: Excellence & Power in Clinical Nursing Practice*, Addison-Wesley Publishing Company Inc., San Francisco, United States.

Biddle, B.J. & Thomas, E.J. 1966, *Role Theory: Concepts & Research*. John Wily & Sons Inc., New York, United States.

Bolger, T. 1985, 'A Species Called Clinical Teacher', *Nursing Mirror*, vol. 160, p. 41.

Bull, R. & Hart, G. 1995. 'Clinical Nurse Specialist Walking The Wire', *Contemporary Nurse*, vol. 4, pp. 25-32.

Burns, N. & Grove, S.K. 1993, *The Practice of Nursing Research. 'Conduct, Critique And Utilisation'* (2nd Ed.) W B Saunders, Philadelphia, USA.

Buszta, C. & Sovero, B. 1994, 'Developing Laser Competencies'. *Australian Operating Room Nurses Journal*, vol. 59, no. 2, pp. 467-471.

Butcher, L. 1991, 'Evaluating The Affective Domain Consider a Likert Scale'. *Journal Of Nursing Staff Development*, vol. Sept/Oct, pp. 234-237.

Cameron, S. 1989, 'Competencies for Registration of Nurses in Australia', in *Issues in Australian Nursing 2*, eds Gray, G., & Pratt, R, pp . 209-222, Churchill & Livingstone, Sydney Australia.

Chourdy, UK. 1992, 'New Nurse Faculty Members: Core Competencies for Role Development. *Journal Of Nursing Education*, vol. 31, no. 6, pp. 265-272.

Clifford, C. 1989, 'The Clinical Teaching Role of the Nurse Teacher'. (*Unpublished Thesis*) London, United Kingdom.

Clifford, C. 1992, 'The Role of The Nurse Teacher', *Nurse Education Today*, vol. 12, pp. 340-349.

Clifford, C. 1996, 'Role: A Concept Explored in Nursing Education', *Journal of Advanced Nursing*, vol. 23, pp. 1135-1141.

Confederation of Australian Critical Care Nurses. 1994, *Competency Standards For Critical Care Nurses*. Ink Press, Perth, Australia.

Craddock, E. 1993, 'Developing The Facilitators Role in The Clinical Area', *Nurse Education Today*, vol. 13, pp. 217-224.

Crotty, M. 1992, 'The Perception of Nurse Teachers Regarding the Preparation for Their Role in Project 2000 Programs', *Nurse Education Today*, vol. 12, pp. 350- 356.

Crotty, M. 1993, a, 'The Changing Role of The Nurse Teacher', *Nurse Education Today*, vol. 13, pp. 415-420.

Crotty, M. 1993, b, 'Clinical Role Activities of Nurse Teachers in Project 2000 Programs', *Journal of Advanced Nursing*, vol. 18, pp. 400, 464.

Crotty, M. 1993, c, 'The Emerging Role of the British Nurse Teacher in Project 2000 Programs: A Delphi Survey'. *Journal of Advanced Nursing*, vol. 18, pp. 150-157.

Davis, E. 1991, 'The Relationship between Theory and Practice in the Education Process', in *Towards A Discipline of Nursing*, pp 149-170, eds Gray, G. & Pratt, R, Churchill & Livingstone, Sydney, Australia.

- del Bueno, D., Griffin, L., Burke & Foley, M A. 1990, 'The Clinical Teacher. A Critical Link in Competence Development', *Journal of Nursing Staff Development*, vol. 6, no. 3, pp. 135-138.
- Dempsey, P. & Dempsey, A. 1992, *Nursing Research With Basic Statistical Applications*. (3rd ed.), James & Bartlett Publishers, Boston, USA.
- Duffield, C. 1988, 'Nursing in the 1980s and 1990s - A Challenge for Managers', *International Journal of Nursing Studies*, vol. 25, no. 2, pp. 125-134.
- Duffield, C. 1989, a, 'The Role of Nursing Unit Managers - A Delphi Survey'. *Australian Health Review*, vol. 12, pp. 14-32.
- Duffield, C. 1989, b, 'Nursing Unit Managers defining a Role'. *Nursing Management*, vol. 25, no. 4, pp. 63-67.
- Duffield, C. 1989, c, 'The Competencies Expected of First Line Managers - An Australian Context, *Journal of Advanced Nursing*, vol. 14, pp. 997-1001.
- Duffield, C. 1991, 'Maintaining Competence for 1st Line Managers: An Evaluation of the Use of The Literature', *Journal of Advanced Nursing*, vol. 16, pp. 55-62.
- Duffield, C. 1993, 'The Delphi Technique, A Comparison of Results Obtained Using Two Expert Panels', *International Journal of Nursing Standards*, vol. 30, no. 3, pp. 227-237.
- Duffield, C., Donoghue, J., Pellitier, D. & Adams, A. 1993, a, 'First Line Managers In NSW: Perceived Role Competencies, Part 1'. *Contemporary Nurse*, vol. 2, no. 2, pp. 56-63.

- Duffield, C., Donoghue, J., Pellitier, D. & Adams, A. 1993, b, 'First Line Managers In NSW: Perceived Role Competencies, Part 2'. *Contemporary Nurse*, vol. 2, no. 3, pp. 110-117.
- Duffield, C., Donoghue, J. & Pellitier, D. 1993, 'CNS's Perceptions of Role Competencies: One Australian Perspective', *Clinical Nurse Specialist*, vol. 9, no. 1, pp. 13-21.
- Duldt, W. & Giffin, K. & Patton, B. R. 1984, *Interpersonal Communication In Nursing*, F A Davis Company, Philadelphia, USA.
- Dulock, H. 1993, 'Research Design: Descriptive Research', *Journal of Pediatric Oncology Nurses*, vol. 10, no. 4, pp. 154-157.
- Ewan, C. & White, R. 1992, *Teaching Nursing - A Self Instructional Handbook*. Chapman & Hall, Victoria, Australia.
- Flaskerual, J. 1988, 'Is The Likert Scale Formal Culturally Biased?' *Nursing Research*, vol. 37, no. 3, pp. 185-186.
- French, P. 1992, 'The Quality of Nurse Education in the 1980s', *Journal of Advanced Nursing*, vol. 17, pp. 619-631.
- Gerrish, C. 1990, 'An Analysis of The Educational Role of the Ward Sister (Implications for Nurse Education)', *Nurse Education Today*, vol. 10, pp. 198-205.
- Gerrish, K. 1992, 'The Nurse Teacher's Role in the Practice Setting', *Nurse Education Today*, vol. 12, pp. 227-232.
- Gibson, T. & Lawson, D. 1994, 'ANCI Competencies Assessment Kit Workbook 1 & 11', *Australian Nursing Council Inc.*, Canberra, Australia.



Giro, E. A. 1993, a, 'Assessment of Competence in Clinical Practice. A Phenomenological Approach', *Journal of Advanced Nursing*, vol. 18, pp. 114-119.

Giro, E. A. 1994, b, 'Assessment of Competence in Clinical Practice - A Review of the Literature', *Nurse Education Today*, vol. 13, pp. 83-90.

Gonczi, A. 1994, 'Global Perspective's on The Competency Debate', *Unpublished Address to the NSW College of Nursing*, March, Sydney New South Wales, Australia.

Gonczi, A., Hager, L. & Oliver, L. 1990, *Establishing Competency Based Standards In The Professions*, Australian Government Printing Service, Canberra, Australia.

Goodman, C. 1987, 'The Delphi Technique. A Critique', *Journal of Advanced Nursing*, vol. 12, pp. 729-734.

Goodwin, L. & Goodwin W. 1991, 'Focus on Psychometric Estimating Construct Validity', *Research In Nursing & Health*, vol. 14, pp. 235-245.

Graham, B. 1986, 'Strategies For Group Teaching', in *Teaching in Nursing Practice - A Professional Model*, eds, Whiteman, E., Graham, G., Glerit, C & Boyd, M., Appleton Century, Connecticut.

Gray, J. & Forstom, S. 1991, 'Generating Theory From Practice: The Reflective Technique', in *Towards A Discipline of Nursing*, eds, Gray, G. & Pratt, R., pp. 355-372, Churchill & Livingstone, Sydney, Australia.

Gray, G. & Pratt, R. 1991, *Towards A Discipline of Nursing*, Churchill & Livingstone, Sydney Australia.

Hardy, M. & Conway, M. 1988, *Role Theory: Perspectives For Health Professionals*. 2nd ed., Appleton & Lange, Connecticut, United States of America.

- Hart, G. & Rotem, A. 1994, 'The Best and Worse: Students Experiences of Clinical Education', *The Australian Journal of Advanced Nursing*, vol. 11, no. 3, pp. 26-33.
- Hector, W. 1973, *The Work of Mrs Bedford Fenwick and the Rise of Professional Nursing*, Royal College of Nursing and National Council of Nurses of the UK, London, UK.
- Henderson, A. 1997, 'Current Philosophical Perspectives of Nurse Education', *The Bulletin*, Feb., pp. 1-4.
- Heywood, L., Gonczi, A & Hager, P. 1992, *Clarification of Professional Complexity. A Guide To Development of Competency Standards for Professions*. National Officer of Overseas Research, Research Paper No. 7.
- Higgins, L. 1991, 'How Adequately are Nurses Being Prepared for Their Health Teaching Role?' *The Australian Journal of Advanced Nursing*, vol. 8, no. 3, pp. 11-14.
- Hinchliff, S. (ed.). 1987, *Teaching Clinical Nursing*. Churchill & Livingstone (2nd ed.), London, United Kingdom.
- Hird, V. 1994, 'Transforming Transient Clinical Events into Educational Sound Experiences - Open Meeting - Reflections on Workplace Learning', *The Bulletin*, Winter, pp. 4-5.
- Hird, V. 1995, 'Nursing Competencies: The Artistry of Nursing'. *St. Vincent's Nursing Monograph*, pp. 22-25.
- Horsfall, J. 1990, 'Clinical Placement: Pre-Briefing and Debriefing as Teaching Strategies', *The Australian Journal of Advanced Nursing*, vol. 8, no. 1, pp. 3-7.

- Howie, J. 1988, 'The Effective Clinical Teacher: A Role Model', *The Australian Journal of Advanced Nursing*, vol. 5, no. 2, pp. 23-26.
- Jones, J. 1985, 'A Study of Nurses Tutors' Conceptualisation of their Ward Teaching Role', *Journal of Advanced Nursing*, vol. 10, pp. 349-360.
- Karuhije, H. 1986, 'Educational Preparation for Clinical Teaching. Perceptions of the Nurse Educators', *Journal of Nursing Education*, vol. 25, no. 4, pp. 137-143.
- Linstone, H. & Turoff, M. (Eds.). 1975, *The Delphi Method: Techniques And Applications*, Addison-Wesley Publishing Company, Inc., London, UK.
- LoBiondo-Wood, G. & Haber, J. 1994, *Nursing Research Methods, Critical Appraisal, And Utilisation*, (3rd ed.), Mosby, St. Louis, USA.
- Mapp, B. 1982, 'The Clinical Teacher', *Nursing Mirror*, vol. 27, p. 60.
- Martin, J. 1992, 'Effectiveness of the Clinical Teacher: A Study in Performance Appraisal', *5th National Nursing Education Conference Proceedings*, October, Alice Springs, pp. 41-251.
- McKenna, H. 1994, 'The Delphi Technique: A Worthwhile Research Approach for Nursing?' *Journal of Advanced Nursing*, vol. 19, no. 6, pp. 1221-1225.
- Meleca, C. B., Schimpfhauser, F., Witteman, J & Sachs L. 1981, 'Clinical Instruction in Nursing. A National Survey', *Journal of Nursing Education*, vol. 20, no. 8, pp. 32-39.
- Miles, M. & Huberman, A. 1994, *An Expanded Scorebook. Qualitative Data Analysis*, (2nd ed.), Sage Publications, London, United Kingdom.

Morgan, J, & Warbinek, E. 1994, 'Teaching Behaviours of Clinical Instructors: An Audit Instrument', *Journal of Advanced Nursing*, vol. 20, pp. 160-166.

Morgan, S. 1991, 'Teaching Activities of Clinical Instructors during the Direct Client Care Period: A Qualitative Investigation', *Journal of Advanced Nursing*, vol. 16, pp. 1238-1246.

Nehring, V. 1990, 'Nursing Clinical Teacher Effectiveness Inventory: A Replication Study of the Characteristics of Best and Worst Clinical Teachers as Perceived by Nursing Facilities and Students', *Journal of Advanced Nursing*, vol. 15, pp. 934-940.

New South Wales Department of Health. 1991, *Nurse Education Structure and Salaries. Circular 91/92*, NSW Department of Health, Sydney, Australia.

New South Wales Department of Health. 1995, *Nursing Career - Pathways for Nurses in NSW*, NSW Department Of Health, Sydney, Australia.

New South Wales Department of Health. 1997, *Public Hospital State Award - Guidelines for Clinical Nurse Specialist Classification*, NSW Department of Health, Sydney, Australia.

New South Wales Nurses Association. 1987, *Public Hospital State Award - Guidelines For Clinical Nurse Consultant (Re) Classification*, NSW Nurses Association, Sydney, Australia.

New South Wales Nurses Association. 1990, *Structural Efficiency Principle "Without Prejudice" Submission, June*, NSW Nurses Association, Sydney, Australia.

New South Wales Nurse Association. 1995, *Public Hospital Nurses' State Award*, NSW Nurses Association, Sydney, Australia.

- Owen, S. 1993, 'Identifying a Role for the Nurse Teacher in the Clinical Area', *Journal of Advanced Nursing*, vol. 18, pp. 816-825.
- Packer, J. L. 1994, 'Education For Clinical Practice. An Alternative Approach', *Journal of Nursing Education*, vol. 33, no. 9, pp. 411-415.
- Parkes, R. 1991, 'Competency Based Training. Australia Moves to a Competency Based System of Training and Education', *The Australian Nurses Journal*, vol. 21, no. 5, pp. 12-13.
- Parkes, R. 1992, a, 'Nursing Competencies. Applying a Competency Based Training System to Nursing. Part One: Entry To EN & RN Practice', *The Australian Nurses Journal*, vol. 21, no. 6, pp. 7-8.
- Parkes, R. 1992, b, 'Nursing Competencies. Applying a Competency Based Training System to Nursing. Part Two: Competencies across the Nursing Industry and Gender Issues', *The Australian Nurses Journal*, vol. 21, no. 7, pp. 9-21.
- Polit, D. & Hungler, B. 1995, *Nursing Research. Principles And Methods* (5th ed.), J B Lippincot Company, Philadelphia, USA.
- Pudge, E. 1986, 'Research on Clinical Teaching', in *Review of Research in Nursing Education*, ed. Holzener, W., vol. 1, pp. 73-92, National League For Nursing, New York, USA.
- Reeve, M. 1994, 'Development of an Instrument to Measure Effectiveness of Clinical Instructors', *Journal of Nursing Education*, vol. 33, no. 1, pp. 15-20.
- Reilly, D. E. & Oermann, M. H. 1992, *Clinical Teaching In Nursing Education* (2nd ed.), National League For Nursing, New York, USA.

Russell, L. 1988, 'Nursing Education: A Time for Change 1960 - 1980', *The Australian Journal Of Advanced Nursing*, vol. 5, no. 4, pp. 36-42.

Russell, L. 1990, *From Nightingale To Now. Nurse Education In Australia*, W B Saunders, Bailliere Tindall, Sydney, Australia.

Scheller, M. L. 1993, 'A Qualitative Analysis of Factors in the Work Environment that Influence Nurses. Use of Knowledge Gained from Continuing Education', *The Journal of Continuing Education*, vol. 24, no. 3, pp. 114-121.

Siegloft, L. & Walker, M. C. 1992, 'Developing a New Reality from Strong Foundations, in *Issues In Australian Nursing*, 3, eds. G. Gray & R. Pratt, pp. 229-243, Churchill & Livingstone, Sydney, Australia.

Skodol Wilson, H. 1989, *Research In Nursing* (2nd ed.), Addison - Wesley Publications Company, Philadelphia, USA.

Smyth, T. 1988, 'Marginality and the Role of the Clinical Teacher', *Journal of Advanced Nursing*, vol. 13, pp. 621-630.

*Sydney Morning Herald*. 1995 - 1996. Job Advertisements - Medical / Hospitals.

Szekely, E. 1981, 'A Philosophy of Clinical Education', *The Australian Nurses Journal*, vol. 11, no. 2, pp. 51-52.

The Concise English Dictionary, 1988, New Orchard Editions, Dorset, UK.

Thompson, J. 1983, 'The Ball is in my Court', *Nursing Mirror*, March, pp. 22-23.

University of Technology. 1997, Verbal Conversation with Professor - Nursing Faculty.

Wellard, S. J. & Rolls, C. & Ferguson D. 1995, 'Evaluating Clinical Educators: An Employers Perspective', *Journal of Advanced Nursing*, vol. 21, no. 4, pp. 737-42.

Williams, P. & Webb, C. 1994, 'The Delphi Technique: A Methodological Discussion', *Journal of Advanced Nursing*, vol. 19, pp. 180-186.

Windsor, A. 1987, 'Nursing Students' Perceptions of Clinical Experience', *Journal of Nursing Education*, vol. 26, no. 4, pp. 150-154.

Wood, V. 1987, 'The Nursing Instructors and the Teaching Climate', *Nurse Education Today*, vol. 7, pp. 228-234.

## **APPENDIX ONE**

### **Eight Job Advertisements for Clinical Educators**

#### **1. CLINICAL RESOURCE NURSE - 2 POSITIONS**

##### **Intensive Care Unit and the Emergency Unit**

Prince of Wales Children's Hospital - We are seeking two highly motivated experienced registered nurses that will be responsible and accountable for the provision of clinical nurse education in these two units.

**Intensive Care Unit** - This 10 bed unit that provides care to infants and young children with a variety of critical health problems.

**Emergency** - This new unit due is to be completed at the end of the year. The unit will provide care for children with a wide variety of diagnoses including children of all ages.

**Essential:** Current NSW professional nursing education, three years recent post registration pediatric nursing experience, relevant post registration qualification, recent experience in clinical teaching and demonstrated communication skills.

**Desirable:** Possession of or working towards a relevant tertiary qualification and experience in adult education and teaching methodologies.

**Inquires** Intensive Care Unit, Ms H Bullot (02) 399-4443 and Emergency Unit, Ms J Montgomery (02) 399-4514.

**Applications:** In writing giving full qualifications and experience together with, the name, addresses and phone numbers of two referees, should be forwarded to Ms P McShane, Nurse Manager, Nursing Administration, Prince of Wales Hospital CNR High and Avoca Street, Randwick NSW 2031.

**Closing Date:** 13 October 1995.



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## **2. CLINICAL NURSE EDUCATOR**

### **Hematology Unit / Bone Marrow Transplant Unit**

St. Vincent's Hospital is seeking a Clinical Nurse Coordinator for the Bone Marrow Transplant Unit / Hematology Unit. The Hematology / Bone Marrow Transplant Unit is an innovative unit that cares for patients from within NSW.

**Essential:** Current NSW Nurses' Registration Board Authority to practice as a General/Comprehensive Nurse.

Extensive clinical experience in Bone Marrow Transplant/Hematology Nursing.

**Desirable:** Hold or working towards a tertiary qualification, preferably in education or equivalent.

**Inquires:** Nursing Unit Manager, Ms J Southwall CH19 South St. Vincent's Hospital,  
(02) 339-1111

**Applications:** In writing to the Nursing Manager - Personnel, Nursing Administration St. Vincent's Hospital, Darlinghurst Road, Darlinghurst, 2001. By the 12 December 1995.

## **3. THE SUTHERLAND HOSPITAL AND COMMUNITY HEALTH SERVICE CLINICAL EDUCATOR - INTENSIVE / CORONARY CARE UNIT**

Would you like to be part of a dynamic team? If so, we would like to hear from you. Our combined Intensive / Coronary care unit is a 15 bed unit that provides critical care services to a wide range of clientele. We require a energetic clinical educator who will be responsible for organising orientation and inservice education for all Registered Nurses in the Intensive / Coronary Care Unit.

**Qualification:** Registered General Nurse, Currently Registered Intensive / Acute or Coronary Care Certificate. Coronary Care experience post course at least one year

**Inquires:** Ms R Curtis, Nursing Unit Manager, 540-7888, Monday to Friday 8.00 am to 5.00 pm

**Closing Date:** 25 April 1996.

#### **4. ST GEORGE HOSPITAL AND COMMUNITY HEALTH SERVICES**

##### **TRAINEE ENROLLED NURSE COORDINATOR**

Expressions of interest are sought from suitably experienced Registered Nurses for a 12-month relief position of Trainee Enrolled Nurse Coordinator for St. George Hospital. The successful applicant will be responsible for the supervision of Trainee Enrolled Nurses' Clinical practice and assisting with the acquisition of clinical nursing skills in accordance with the St. George Hospital, the St. George TAFE and the NSW Nurses Registration Board.

**Minimum:** Registered Nurse with at least 5 years post registration, general medical / surgical nursing experience

**Desirable:** Experience in midwifery, pediatrics, psychiatric, orthopedic, or rehabilitation nursing.

Excellent interpersonal and communication skills

Tertiary educational qualifications or working towards same

**Inquires:** Ms Coral Troth, Manager Staff Education St. George Hospital,  
350-2179 or 350-1111 and page

**Closing Date:** 10 November 1995

#### **5. ROYAL PRINCE ALFRED HOSPITAL AND COMMUNITY SERVICES**

##### **CLINICAL NURSE EDUCATOR**

An experienced Clinical Educator is required by the Royal Prince Alfred Hospital to coordinate the New Graduate program and assist with education for nurses with the hospital.

**Qualification:** Registered Nurse  
 Diploma in Nurse Education or equivalent, or working towards appropriate qualifications  
 Demonstrated teaching and administrative abilities

**Inquires:** Mrs M Jaminseon, Senior Nurse Manager - Personnel587-1111 and page

**Closing Date:** 10 April 1996

## 6. CALVARY HOSPITAL KOGARAH

### CLINICAL EDUCATOR, STAFF DEVELOPMENT

Calvary Hospital is a 3rd schedule hospital run by the Sisters of Charity. We are seeking Clinical Educator to work in our staff development and conduct educational programs for the nursing staff of Calvary Hospital. The educator will be responsible for orientation of staff, provision of an inservice program, assisting the assimilation of new graduate staff and perform the placements of postgraduate and undergraduate students.

**Qualifications:** Registered Nurse with current registration  
 Relevant post basic qualifications or working towards the same  
 Experience in Palliative Care, and/or gerontology  
 Sound knowledge of Continuous Quality Improvement

**Desirable:** Interpersonal communication skills, Computer skills

**Responsible to:** Director of Nursing

**Award Classification:** Registered Nurse Year 5 - thereafter

**Inquires:** Ms J Benson, Director of Nursing Calvary Hospital 586-2322  
 By January 10 1996

**7. MT DRUITT HOSPITAL AND COMMUNITY HEALTH SERVICES**

**EDUCATOR / RESEARCH COORDINATOR**

Applicants are invited from suitable applicants to apply for the above position.

- Qualifications:** Registered Nurse
- 5 years current experience in medical / surgical acute care
- Relevant Tertiary qualifications
- Experience conducting Research
- Duties:** Clinical Education and Research /Quality activities within the medical services (nursing) in liaison with the Ass. Director of Nursing and Department Managers and the Head of the Department off Surgery
- Award Grade:** Clinical Nurse Specialist
- Responsible to:** Senior Nursing Education Officer
- Inquires:** Senior Nursing Education Officer phone 351-9490
- Closing Date:** Monday 27 April 1996

**8. ROYAL NORTH SHORE HOSPITAL AND COMMUNITY HEALTH SERVICES - CLINICAL NURSE EDUCATOR - NEONATAL INTENSIVE CARE UNIT**

The Clinical Nurse Educator - Neonatal Intensive Care Unit is responsible for the education of Registered and Enrolled Nurse in the 12 bed Neonatal Intensive Care Unit at the Royal North Shore Hospital. The position involves creating and implementing an in service education program for the unit and the preparation of specific educational packages for new staff entering the unit and for Postgraduate midwifery students.

**Qualifications:** Registered General Nurse  
Certified Midwife  
Post Graduate Neonatal Nursing Qualification  
A minimum of 3 years clinical experience in Neonatal Intensive Care

**Desirable:** Relevant Tertiary Education Qualifications or working towards it  
Teaching experience

**Contact:** Ms Lorraine Ferguson, Manger Staff Education, on 962-9000

**Close:** Friday. 5.00 pm 10 March 1996

## **APPENDIX TWO**

### **Eight Job Descriptions for Clinical Educators**

#### **1. ST.VINCENT'S HOSPITAL**

**DEPARTMENT:** HAEMATOLOGY

**COST CENTRE NO:** 00024

**POSITION:** Clinical Nurse Educator, Bone Marrow Transplant and Hematology Unit

**AWARD CLASSIFICATION:**CNE

**RESPONSIBLE TO:** Nursing Unit Manager Ch19 South

**ACCOUNTABLE TO:** Nurse Manager

**IMMEDIATE SUBORDINATES:** Nil **TOTAL NO OF SUBORDINATES:** Nil

#### **QUALIFICATIONS:**

##### **Essential:**

- Current NSW Nurses' Registration Board Authority to Practice certificate as a General/comprehensive Nurse.
- Extensive clinical experience in Bone Marrow Transplant and Hematology Nursing.

##### **Desirable:**

- Hold or be working towards a tertiary qualification, preferably in education or equivalent.

**Hours of duty:** 0730 -1600 hours, Monday to Friday weekends off duty, public holidays on duty; and six (6) Weeks Annual Leave.

#### **BASIC OBJECTIVES:**

Within the framework of the philosophy and policies of the Division of Nursing, the Clinical Educator is responsible for initiating and implementing various educational strategies to facilitate the effective orientation and ongoing development of clinical and theoretical skills of Registered Nurses in the Bone Marrow Transplant and Hematology Unit.

#### **MAJOR ACTIVITY RESPONSIBILITIES:**

##### **Educational:**

- Understand the objectives of the Unit and, through this understanding, develop and conduct orientation and ongoing education programs for all nursing staff.
- Teach clinical skills necessary for the care and support of Bone Marrow Transplant/Hematology patients and assess that all nurses who work in the unit are proficient in these skills.
- Identify the specific problems related to nursing patients in this specialist and organise unit base quality assurance projects to research some of these problems
- Familiarise all nurses with the department of Nursing Inservice Education Programs and encourage nurses to attend these sessions.

- Join the hospital library and keep up to date with current nursing trends in Professional Issues, Hematology and Bone Marrow Transplant through current Nursing Journals.
- Act as resource person for the care of Hickman Catheters both for hospital staff and patients.
- Work with Nursing Unit Manager and Registered Nurses in the discharge planning of Bone Marrow Transplant/Hematology patients.

**Administrative:**

- Update ward manuals.
- Be aware of current trends in Hematology and Bone Marrow Transplant and develop and/or introduce new procedures where applicable in consultation with Nursing Unit Manager and Hematology team.
- Help prepare update of patient information booklet.
- Develop and participate in strategies for the maintenance of morale of staff in the Unit.
- Consult in the preparation of nurses' assessments.
- Adhere to and implement hospital policies, nursing protocols, the NSW Nurses Registration Board Guidelines for Nursing Practice and the Health Care Philosophy of the Sisters of Charity.
- Maintain adequate records of orientation progress, clinical instruction, tutorials, etc.

**Professional:**

- Promote a professional image when interacting with other health professionals, patients, relatives and the general public.
- Actively pursue and maintain self-education and professional development.
- Demonstrate leadership and role model skills as evidenced by:
  - Effective communication skills
  - Ability to work well with others
  - Ability to motivate others both individually and in a group
  - Awareness of current trends in nursing
  - Ability to plan, organise and direct others
  - Acquisition of adult learning/teaching skills.
- Perform other duties as directed from time to time.

**PERFORMANCE MEASUREMENT:**

After 3 months, and then annually, by the Nurse Manager Oncology, Cell Biology Institute.

It is a requirement that the occupant of this position:

- Participate in hospital quality improvement activities.
- Comply with the following government and hospitals policies
  - Smoking is not permitted throughout SVH.
  - Occupational Health and Safety
  - Rehabilitation
- Maintain confidentiality of all hospital activities, records and information.

**2. CALVARY HOSPITAL KOGARAH INC.**

**DEPARTMENT:** Nursing

**POSITION TITLE:** Program Coordinator

**POSITION:** Clinical Educator, Staff Development



**AWARD CLASSIFICATION:**Registered Nurse, Range Year 5 - Thereafter.

**RESPONSIBLE TO:** Director of Nursing.

**QUALIFICATIONS:**

**Essential:**

- Registered Nurse (List A) with current NSW Registration.
- Relevant Post Basic Qualifications or working towards it.
- Experience in Palliative Care, and/or gerontology.
- Sound knowledge of Continuous Quality Improvement.

**Desirable:**

- Interpersonal communication skills.
- Computer skills.

**JOB SUMMARY:**

The Clinical Educator, Staff Development is responsible for:

- Orientation of all staff
- 1st Year Graduate Programs
- Formal Inservice Education
- Programs for Registered Nurses and Enrolled Nurses in the discipline of Palliative Care
- Clinical placement of postgraduate and undergraduate students.

**CONDITIONS OF EMPLOYMENT:**

- In accordance with the NSW Public Hospitals (State) award together with the Philosophy and Mission of Calvary Hospital Kogarah, Inc.
- Maintain current registration in NSW and submit relevant original documentation to Nursing Administration on an annual basis within fourteen (14) days of renewal date.

**HOURS OF DUTY:**

Monday to Friday: 0800-1630 hours.

Four weeks Annual Leave.

Public Holidays off.

**RESPONSIBILITIES:**

**Education:**

- I. Coordinate specified courses in accordance with the developed curriculum and/or program by:
  - A. Liaison with nominated lecturers.
  - B. distribution of the course information
  - C. Organising participant's lists and course applicants, and acknowledgments.
- II. Participate in lectures in nominated specialist fields.
- III. Develop Inservice Programs as negotiated with Nursing Unit Manager and Clinical Nurse Consultant.
- IV. Develop Programs for Undergraduate and Postgraduate students.

**Research:**

- Maintain a current resource file on research and articles pertaining to Palliative Care and Gerontology.
- Participate as required in research on nursing issues in Palliative Care and Gerontology.

**Management:**

- Attend meetings as designated by the Director of Nursing.
- Participate In Continuing Quality Improvement activities within the Division of Nursing and the Hospital as appropriate.

**Professional Development:**

Participate in continuing education both internally/externally and be responsible for ones own professional development.

**General:**

- I. Be familiar with the :
  - A. Philosophy of Health Care Services under the Care of the Little Company of Mary
  - B. Principles of Palliative Care
  - C. Public Hospital Act
  - D. Nurses Registration Act
  - E. OH&S Act
  - F. Workers Compensation Act
  - G. Hospital by-laws
  - H. Health Department Circulars
  - I. Poisons Act
  - J. Equal Employment Opportunity
  - K. Structural Efficiency Principles
- II. Assume other responsibilities as negotiated by the Director of Nursing.

**PERFORMANCE EVALUATION:**

An appraisal consisting of feedback on performance by the Clinical Nurse Consultant and a staff appraisal is to be completed at three (3) months and yearly intervals thereafter, and/or at the request of the Director of Nursing. An appraisal is also to be completed prior to termination.

**PERFORMANCE EVALUATION STANDARDS:**

The Performance of the Clinical Educator will be evaluated by:

1. Coordination of education programs.
2. Quality of ward based education programs.
3. Accuracy and quality of communication and record keeping of educational programs.
4. Ability to function as a resource person.
5. Contribution to the development of research programs.

I have read this Job Description, understand its requirements and agree to fulfill its function To the standard outlined.

.....  
Employee's Signature

.....  
(Please print name)

I have explained the duties and responsibilities of this position to this employee.

Director of Nursing: ..... Date: .....

### **3. THE SUTHERLAND HOSPITAL CARINGBAH AND COMMUNITY HEALTH SERVICE**

**JOB TITLE:** Clinical Educator for Intensive/Coronary Care Unit - Full Time

**RESPONSIBLE TO:**

- i. Director of Nursing - Administration.
- ii. Nursing Manager-

**RESPONSIBLE FOR:**

- Organising orientation and inservice education for Registered Nurses Intensive/Coronary Care.

**WAGES AND CONDITIONS:**

- In accordance with the NSW Public Hospital Nurses (State Award).

**HOURS OF DUTY:**

- 0700-1530 0800-1630 1430-2300 1330-2200 2245-0715
- Five days a week according to ward needs

**QUALIFICATIONS:**

- Registered General Nurse.
- Currently Registered Intensive/Acute or Coronary Care Certificate.
- Coronary Care experience post course at least one year.

**ASSESSMENT:** After the first three months, then annually on anniversary date.

**FUNCTIONS & RESPONSIBILITIES.**

1. Provides skillful observation and supervision of staff members performing procedures for the first time and for the purpose of assessment
2. Liaises with Nursing Unit Manager/Staff Specialists of ICU, in relation to Inservice Education Program.
3. Confers with Nursing Unit Manager on appraisal of staff work performance.
4. Organises relevant Inservice lectures and visits to other hospitals. For Intensive Care and related staff members.
5. Organises and assists staff members of ICU in the preparation of presentations (written or verbal).
6. Review inservice program for staff through evaluation and feedback from staff and up-dates program as required.
7. Encourages staff to complete the written exercises included in the program for inservice. Encourages interest of staff members in ongoing education and quality assurance.
8. Creates effective lines of communication with nursing colleagues, paramedical and medical staffing regard to educational matters.
9. Assumes responsibility for direct care of patients during orientation period of staff.
10. Provides individual and group tuition where indicated in relation to practical procedures.
11. Remains supernumerary to ward staff for 5 shifts.

#### **4. ROYAL NORTH SHORE HOSPITAL & COMMUNITY SERVICES OF SYDNEY**

**JOB TITLE:** Clinical Nurse Educator      **DIVISION:** Nursing

**AREA OF RESPONSIBILITY:** Neonatal Intensive Care

**RESPONSIBLE TO:** Director of Nursing Services through Area Manager Education Professional Development Center.

#### **QUALIFICATIONS:**

##### **Essential:**

- Registered General Nurse.
- Certified Midwife
- Post Graduate Neonatal Nursing Qualification
- A minimum of 3 years clinical experience in Neonatal Intensive Care.

##### **Desirable:**

- Relevant Tertiary Education Qualifications or working towards it.
- Teaching experience.

#### **DEVELOPMENT REVIEW:**

By Area Manager Education or delegate after 3 months and then as agreed, minimum annually.

#### **1. CLINICAL MANAGEMENT** in collaboration with the Nursing Unit Manager

- 1.1 Develop, implement and evaluate orientation programs for new Registered Nurses, postgraduate Students and Student Midwives within the Neonatal Intensive Care Unit.
- 1.2 Organise specific clinical teaching sessions for Registered Nurses, Post Graduate Students and Student Midwives.
- 1.3 Develop, implement and evaluate continuing education sessions for staff working in the Neonatal Intensive Care Unit.
- 1.4 Organise and contribute to inservice education in the Neonatal Intensive Care Unit.
- 1.5 Organise and participate in the development and maintenance of clinical standards, procedures and policies.
- 1.6 Liaise with the neonatologists on matters related to formulation and change of practical procedures and policies.
- 1.7 Encourage staff to critically analyse neonatal nursing research in order to evaluate current nursing practice.
- 1.8 Participate in trialling and evaluating new equipment in the Neonatal Intensive Care Unit.
- 1.9 Act as a resource person in the use and troubleshooting of equipment in the Neonatal Intensive Care Unit.
- 1.10 Liaise with the Midwifery Educator in relation to the clinical progress of Student Midwives.
- 1.11 Assist with the assessment for Registered Nurses, postgraduate Students and Student Midwives clinical skills and competencies.
- 1.12 Act as a resource person for Registered Nurses, postgraduate Students, Student Midwives, resident medical staff, paramedical staff and visiting nursing staff on matters related to neonatal care.
- 1.13 Assist with the review of literature and audiovisual material for educational use.
- 1.14 Act as a resource person for other personnel and ward areas at Royal North Shore Hospital on matters related to neonatal nursing.
- 1.15 Encourage and assist nursing staff to develop teaching skills.

- 1.16 Advise nursing staff on career pathways.
- 1.17 Assist all nursing personnel to achieve the required level of proficiency, experience and knowledge in relation to the clinical area of the Neonatal Intensive Care Unit.

## **2. QUALITY IMPROVEMENT**

- 2.1 To be active in Quality Improvement activities relating to the Neonatal Intensive Care Unit.
- 2.2 To participate in Quality Improvement Programs as they relate to the Nursing Division.
- 2.3 To encourage and develop research programs as they relate to the Nursing Division.

## **3. PROFESSIONAL**

- 3.1 Maintain own level of knowledge and clinical expertise in accordance with current developments by participating in professional organisations, attending seminars and reading professional journals.
- 3.2 Maintain own clinical skills and competence.
- 3.3 Act as a role model for all staff.
- 3.4 Participate in the Neonatal Intensive Care Unit and hospital staff meetings.
- 3.5 Participate in education programs.
- 3.6 Encourage others to develop professionally by creating an awareness of professional organisations, seminars and professional journals.
- 3.7 Maintain productivity and accountability within the Neonatal Intensive Care Unit's budget and encourage all staff to do it.
- 3.8 Demonstrate non-judgmental and effective communication skills.
- 3.9 Participate in staff appraisal/review as appropriate.
- 3.10 Contributes to the continuing education programs run in the Professional Development Center as appropriate.
- 3.11 Liaises with the Area Manager Education regarding education consultation in the areas of neonatal nursing.

## **5. ROYAL PRINCE ALFRED HOSPITAL**

**POSITION:** Clinical Nurse Educator

### **QUALIFICATIONS:**

- Registered Nurse
- Diplomas in Nurse Education or equivalent, or working towards appropriate qualification.
- Demonstrated teaching and administrative abilities

### **ACCOUNTABILITY:**

- Responsible to the Director of Nursing for Nurse Education and Inservice Area Staff Development Officer

### **FUNCTION:**

Co-ordination of:

- New Graduate Program
- Preceptorship Program
- Orientation Program
- Inservice Program
- Clinical Accreditation Procedures

## **CO-ORDINATION OF:**

### ***1. New Graduate Program:***

- 1.1 Liaise with Director of Nursing on New Graduate Program needs;
- 1.2 Plan and develop structured Programs for the New Graduates entering the hospital environment;
- 1.3 Implement and evaluate structured programs, and revise and review, as required;
- 1.4 Counsel the new graduates when required.
- 1.5 Keep appropriate records and write reports to Director of Nursing, as required;
- 1.6 Attend University/College Careers Markets for recruitment purposes, as required.

### ***2. Preceptorship Program:***

- 2.1 Liaise with Director of Nursing on Preceptorship Program needs;
- 2.2 Plan and develop Preceptor Programs to equip prospective preceptors with appropriate skills to assist all new nursing personnel;
- 2.3 Implement and evaluate the Preceptor Program and revise and review, as required;
- 2.4 Counsel the preceptors when required;
- 2.5 Keep appropriate records and writer reports to Director of Nursing, as required.

### ***3. Orientation Program:***

- 3.1 Assist with the implementation and coordination of orientation programs for all new nursing staff;
- 3.2 Participate in formal teaching of all new staff, in the division of nursing, during their orientation, as appropriate;
- 3.3 Liaise with Director of Nursing to ensure service needs are met with regard to orientation programs for nursing staff;
- 3.4 Advise other health care personnel on educational matters relating to orientation/inservice programs, as required.

### ***4. Inservice Program:***

- 4.1 Research and determine nurse education/inservice/staff development needs on an on-going basis;
- 4.2 Develop appropriate inservice programs for registered nursing staff and enrolled nurses;
- 4.3 Implement inservice programs for the nursing division on an on-going basis;
- 4.4 Utilise results of the Quality Assurance Program in the development of educational programs;
- 4.5 Liaise with other health care personnel and external resource persons, as appropriate, on educational needs of inservice programs;
- 4.6 Research, review and implement inservice programs for registered nurses, which will enable upgrading of current clinical, practice knowledge. Thereby facilitating development maintenance and improvement of skills;
- 4.7 Encourage participation of all nursing staff in inservice programs;
- 4.8 Liaise with Nursing Administration for the release of nursing staff to participate in inservice programs;
- 4.9 Liaise with nursing staff in clinical areas to keep staff informed of inservice program schedules;
- 4.10 Keep informed of the mode of operation of new equipment in the clinical area and provide inservice programs, as necessary;
- 4.11 Assist with the development and implementation of inservice programs in the clinical areas;
- 4.12 Research and review professional literature and other resource material and provide for and encourage utilisation of this to facilitate improvement of patient care;
- 4.13 Integrate nursing inservice activities with other inservice programs within the hospital and Area Health Service, as appropriate.

### ***5. Clinical Accreditation Procedures:***

- 5.1 Liaise with Nursing Administration on the accreditation requirements for nursing personnel within Sutherland Hospital.
- 5.2 Participate in the clinical accreditation of nursing personnel within Sutherland Hospital, as required.
- 5.3 Compile and maintain correct records of specific accreditation procedures for nursing staff, when required.

### **RESPONSIBILITIES:**

#### ***1. Policies and Planning:***

- 1.1 Assist in policy making and planning for nurse education at all levels;
- 1.2 Establish educational objectives for the Inservice Education Orientation Programs in nursing
- 1.3 Research, review, revises and implements changes in educational programs consistent with trends and advances in nursing education;
- 1.4 Implement education policies;
- 1.5 Participate in and communicate nurse education information at meetings, and serve as a committee member, when requested;
- 1.6 Participate in the research, reviewing and revision as necessary, of any policies and procedures involved in nurse education programs;
- 1.7 Plan, organise and evaluate the resources and facilities needed to accomplish the objectives of the educational programs.

#### ***2. Teaching:***

- 2.1 Liaise with Nursing Administration in the correlation of nursing education with service needs;
- 2.2 Participate in formal teaching of nursing staff in educational Programs, as appropriate.

#### ***3. Personnel:***

- 3.1 Liaise on educational matters with other health care personnel and external resource persons, as appropriate;
- 3.2 Be available for staff consultation, counselling and utilisation of appropriate referral skills, when necessary;
- 3.3 Assist with the professional development of all nursing staff.

#### ***4. Records and Correspondence:***

- 4.1 Compile and maintain correct records of specific accreditation procedures for nursing staff, where appropriate;
- 4.2 Communicate and retain all circulars relating to nursing education free statutory bodies;
- 4.3 Initiate and execute appropriate external correspondence in relation to educational programs, liaison with Director of Nursing, as appropriate.

#### ***5. On-Going Educational Programs:***

- 5.1 Provide information on educational opportunities sponsored by institutions other than employing institution, as appropriate;
- 5.2 Liaise with external resource persons on educational matters, as appropriate;
- 5.3 Participate in planning and evaluation sessions in relation to program development;
- 5.4 Pursue own professional development by participating on committees, and attending staff meetings, seminars, as required on educational matters relating to staff development and on-going education;
- 5.5 Participate in on-going educational programs in order to update own knowledge and skills;
- 5.6 Be involved in external commitments relevant to continuing education.

## **6. Administration of Resource/Audio Visual Equipment/Education Center:**

- 6.1 Co-ordinate the utilisation of the Education Center for Inservice/Staff Development Programs;
- 6.2 Liaise with Director of Nursing to develop policies for the utilisation of the Education Center, resource equipment, audio visual aids, by nursing staff and other health personnel under the Area Health Services;
- 6.3 Supervise use of audiovisual equipment for educational programs;
- 6.4 Requisition for educational supplies, new educational equipment and the maintenance needs, as required.

## **6. THE ST GEORGE HOSPITAL & COMMUNITY HEALTH SERVICE**

### **1. General Information:**

**Division:** Nursing & Clinical Support Services

**Position Title:** Trainee Enrolled Nurse (TEN) Coordinator

#### **Requirements:**

##### **Minimum:**

- Registered nurse with at least 5 years post registration, general medical/surgical nursing experience
- Experience in Adult Learning and Education

##### **Desirable:**

- Experience in midwifery, pediatric, psychiatric, orthopedic, or rehabilitation nursing.
- Excellent interpersonal and communication skills
- Tertiary educational qualifications or working towards it.

**Salary/Conditions:** in accordance with NSW Public Hospital (Nursing) State Award

**Hours of Duty:** Monday to Friday, 38 hpw.

**Annual Leave:** 4 weeks

**Performance Appraisal:** After 3 months, then annually

### **2. Management Relationships**

### **3. Role (objectives of position)**

The Coordinator will be responsible for the supervision of TENs' clinical practice, and assisting with the acquisition of clinical nursing skills in accordance with St. George Hospital, St. George TAFE, and the NSW Nurses' Registration Board guidelines.

### **4. Functions (specific functions)**

#### **4.1 Clinical Practice of Trainee Enrolled Nurses (TENs):**

The Coordinator will be responsible for:

- supervision of student's clinical and professional practice
- assisting with the students' orientation to clinical areas
- acting as a resource person for TENs
- planning, implementation and evaluation of weekly group tutorials



#### **4.2 Administration Trainee Enrolled Nurse Course:**

- participating in the area recruitment and selection of TENs
- preparing and coordinating the ward rotating plans in accordance with NRB requirements
- maintenance of accurate student records utilising student records to calculate course completion dates

#### **4.3 Communication Network**

- establishing and maintaining effective liaison with nursing staff at ward/unit placement and the St. George College of TAFE
- establishing and maintaining effective written and verbal communication with all relevant staff
- establishing and maintaining an effective level of support and interaction with the student group.

#### **4.4 Team Member Staff Education:**

- participating as required in other activities within Staff Education

#### **4.5 Professional Development:**

- maintaining own knowledge of changes to clinical practice within St. George
- attending educational programs to enhance the professional knowledge and skills required to perform effectively in the role.

### **5. Performance Appraisal Criteria & Standards for Satisfactory Performance:**

#### ***5.1 The effectiveness of the supervision of the student's clinical practice***

- prescribed number of clinical skills assessments are achieved by students between the first and second block at TAFE
- time spent in clinical teaching and supervision relative to the student's needs
- quality of feedback from NUM's and students

#### ***5.2 Quality of liaison with relevant staff across the SESAHS and TEN course staff at TAFE for effective management of all aspects of the TEN's course program at St. George***

- quality of feedback from NUMs, TENs Educators, Area EN Coordinator, course staff at St. George TAFE, and TENs

#### ***5.3 Accuracy & Presentation of Students' Records:***

- formulation and appropriate distribution of monthly report including statistics on:
  - sick leave/special leave in hours for each student per month
  - total tutorial attendance hours per student per month
  - details of any unsatisfactory ward appraisals
  - formulation and appropriate distribution of plans

#### ***5.4 Planning, Implementation & Evaluation of the Tutorial Program:***

- tutorial program content is based on a needs assessment
- feedback from students indicates quality of speakers is high
- evaluation of the tutorial program at the completion of each course indicates that student learning has been enhanced and learning needs met

#### ***5.5 Ability to Function as a Resource Person:***

- quality of feedback by TENs at completion of each course.

6. I have explained the duties and responsibilities of this position to this employee.

.....  
Assistant Director of Nursing, Personnel

.....  
Date

I have read this job description, understand its requirements and agree to fulfill its functions to the standard outlined

.....  
Employee's Signature

.....  
Date:

## Job Description / Staff Appraisal

TITLE OF POSITION: **Educator/Research Co-ordinator  
(Surgical Services Nursing)**

AWARD CLASSIFICATION:

DEPARTMENT: Medical Services (Nursing)

RESPONSIBLE TO: Senior Nursing Education Officer

RESPONSIBLE FOR: Clinical Education and Research/Quality Activities within the Medical Services (Nursing) in liaison with the Assistant Director of Nursing, Department Managers and the Convenor of the Departments of Surgery.

PERFORMANCE AGREEMENT: To be negotiated on a annual basis with a review period at twelve monthly intervals.

QUALIFICATIONS REQUIRED:

Employee Signature \_\_\_\_\_

Print Name \_\_\_\_\_

Date \_\_\_\_\_

Director of Nursing Signature \_\_\_\_\_

Print Name \_\_\_\_\_

Date \_\_\_\_\_

The following MISSION, VISION, and PHILOSOPHY OF SERVICE statements underpin the organisations role & function.

### MISSION STATEMENT

*We are committed to ensuring the provision of quality health care to our patients and our local community. This is demonstrated by the pursuit of excellence through continuous improvement in all aspects of our work*

*Our commitment is reflected by caring, motivated staff who embrace the values of our hospital.*

### VALUES

INTEGRITY  
COMMITMENT  
EQUITY  
EXCELLENCE  
COMPASSION  
HUMAN DIGNITY

### PHILOSOPHY OF SERVICE

*Mount Druitt Hospital is a health care facility of Western Sydney Area Health Service, under the care of the Catholic Diocese of Parramatta.*

*The catholic church regards health care to be a basic human right which flows from the sacredness of human life. We, the staff of Mount Druitt Hospital, are committed to ensure the work carried out in this hospital reflects this basic human right.*

*Our hospital is marked by the spirit of a christian community which promotes and uses the values of the organisation and the teachings of the church to pursue our mission.*

*In caring for the whole person we recognise the unique nature of every individual and promote service to all members of the community regardless of sex, age, religion, ethnic origin or social status.*

DATE OF APPRAISAL:

February 1st 1996

APPRAISER: **Senior Nurse Educator/Assistant Director of Nursing**

KEY ACTIVITY	KEY INITIATIVE	PERFORMANCE INDICATOR	PERFORMANCE MEASUREMENT
Implementation of Health Dept. Strategic Plan for: 1. Domestic Violence 2. Sexual Assault	Develop and implementation plan for the organisation.	Implementation plan developed by August 1995	
	Coordinate the training programme conducted by accredited trainers.	Teaching aids identified in the Implementation Plan are available. Programme schedule developed and published. Maintenance of inservice records of attendees.	
	Review of programme 6 monthly.	Review submitted to the Nurse Education Practice Review Committee.	
	Identify and contribute to the formation of appropriate policy and procedures which relate to special projects.	Active committee membership.	
Identification of the clinical development needs of staff in Surgical Services by a needs analysis.	Consultation with Visiting Medical Officers in regards of expertise required to nurse their case complexity.	Consultation conducted, the needs and goals identified by September 1995.	
	Consultation with the Nursing Executive in regards to industry needs.	Consultation conducted, the needs and goals identified by September 1995.	
	Survey nursing staff within Surgical Services.	Survey conducted, the needs and goals identified by September 1995.	
	Review of registers available and required and accreditation criteria.	All registers identified and accreditation criteria identified by September 1995.	
	Review the numbers of accredited staff currently on registers.	Numbers of staff on registers identified and targets of accredited staff set for each area in the service by September 1995.	
The implementation of educational programmes in response to the primary identified needs. Identified from the needs analysis conducted in Surgical Services.	To assist appropriate resource personnel in Surgical Services to develop & conduct identified training programmes/initiatives.	Programmes/initiatives commenced by December 1995. Programmes in place and/or conducted.	
Skills Register Maintenance.	Identification of appropriate assessors.	Resource list of appropriate assessors available by March 1995.	

Employee Signature:

Director of Nursing Signature:

KEY ACTIVITY	KEY INITIATIVE	PERFORMANCE INDICATOR	PERFORMANCE MEASUREMENT
	Compilation of appropriate assessment packages.	Assessment of staff for accreditation.	
	Assessment of staff for accreditation	Staff assessed and registers maintained.	
Service/Inservice Programme	Developed and implemented an inservice program in liaison with Nurse Unit Managers, Assistance Director of Nursing and the staff. _____ Maintenance of inservice records.	Ongoing programme implemented by September 1995. _____ Records maintained.	_____
Co-ordination and implementation of Surgical Services/orientation programme	Programme planned and implemented in consultation with the Nurse Unit Managers and the Assistant Director of Nursing. _____ Programme evaluated.	Programmed in place by August 1995. Appropriate resource personnel utilised to conduct the programme. Programme conducted as required. _____ Ongoing evaluation conducted. A 12 month Formal review submitted to the Surgical Services Management Committee January 1996.	_____
Surgical Services Operating Plan	Participate in the development and implementation of Surgical services Operating Plan.	Operating Plans in place by September 1995. Activities assigned to the Education/Research Co-ordinator complete within the time frames set within the Operating Plan.	
Ward based Quality Activity Programmes.	Participate in activities listed on ward based programmes. ----- Participate with the evaluation of the ward based programmes.	Activities participated in complete. -----Review of programmes attended and formally reported to the Quality Review Meeting by December 1995. Service Programme in place by January 1995.	

Employee Signature:

Director of Nursing Signature:

KEY ACTIVITY	KEY INITIATIVE	PERFORMANCE INDICATOR	PERFORMANCE MEASUREMENT
Surgical Services Quality Activities.	<p>Develop and implement a Quality review Meeting for Surgical Services by September 1995.</p> <p>-----</p> <p>Consult with the Visiting Medical Officers to identify Research/Quality Activity needs.</p> <p>-----Develop and implement Research/Quality Activities from identified needs and goals.</p> <p>-----</p> <p>-----In Liaison with Visiting Medical Officers develop and implement 2 Clinical Pathways for Surgical Services.</p>	<p>Review meeting established and in place by September 1995.</p> <p>-----Needs and goals identified by November 1995.</p> <p>-----Medical Research/Quality Activities identified in Surgical Services. Programmed by December 1996.</p> <p>-----Pathways developed and implemented by January 1996.</p>	
A.C.H.S. Accreditation	Develop and implement a review and development mechanism ( in liaison Nurse Unit Managers, Clinical Nurses and Physicians ) for medical clinical practice and procedures.	Clinical policies and / or procedures are developed and implemented as required. Clinical policies and procedures are reviewed as required or at least every three years.	
The Practice of safe and appropriate Infection Control Policies and Practices.	Identification of poor or breeches in Infection Control Policies and Practices.	Liaison with Individuals, Nurse Unit Managers and/or the Infection Control Consultant in relation to poor Infection Control practice.	
Occupational Health and Safety.	Identification of practice or situations which place fellow workers at risk.	Liaison with Individuals, Department Managers and/or the appropriate Zone Representative in relation to Q.H. & S, issues.	
Equal Opportunity and Employment.	Identifications of instances where individuals and/or groups are disadvantaged.	Liaison with Individuals, Department Managers and/or the Human resources Department in relation to E.E.O.	

Employee Signature:

Director of Nursing Signature:

KEY ACTIVITY	KEY INITIATIVE	PERFORMANCE INDICATOR	PERFORMANCE MEASUREMENT
Professional Development.	<p>Maintain a minimum of 40 hours of self education.</p> <p>Professionally active.</p>	<p>Attends relevant in service sessions.</p> <p>Attends relevant conferences.</p> <p>Study/Conference leave reports submitted.</p> <p>Actively involved in professional body.</p> <p>Subscribes to relevant journals.</p>	

**8. THE PRINCE OF WALES CHILDREN'S HOSPITAL  
DIVISION OF NURSING**

**POSITION DESCRIPTION**

<p><b>CLINICAL RESOURCE NURSE - CHILDREN'S INTENSIVE CARE UNIT</b></p>
--

**RESPONSIBLE TO:** The Senior Nurse Manager - Nursing Services, through the Nurse Manager, Children's Intensive Care Unit, The Prince of Wales Children's Hospital.

**QUALIFICATIONS:** Registered Nurse List A.  
Tertiary qualification or willingness to undertake.  
Three years post registration paediatric intensive care experience.  
Relevant post-registration experience.  
Recent experience in clinical teaching.

**TERMS AND CONDITIONS:** In accordance with the New South Wales Public Hospital Nurses' Enterprise Agreement - Clinical Nurse Specialist Category

**PERFORMANCE APPRAISAL:** By the Nurse Manager after three months then annually on anniversary of employment.

**FUNCTIONS:** To provide and be accountable for the provision of Children's Intensive Care Education Service within the polices of:

- The NSW Department of Health
- The NSW Nurses' Registration Board
- The South Eastern Sydney Area Health Service
- The Division of Nursing



# **EDUCATION**

## **STANDARD 1**

**Participate in educational programmes both internally and externally**

### **CRITERIA**

- Demonstrate a formal active role in educational programmes by delivering inservice lectures and attending conferences and seminars.
- Remain informed of new procedures and equipment and ensure clinical and theoretical instruction is provided.
- Seek learning opportunities by attending educational sessions and facilitate in the education of co-workers by sharing knowledge and skills.
- Act as a clinical resource person for the ward , guiding and instructing other nurses as an integral part of his /her duty.
- Act as a preceptor in the orientation of new staff, visitor or guest within a twelve month period.
- Maintain records of attendance at educational programmes.

## **STANDARD 2**

**Provide and encourage education programs for all unit nursing personnel.**

### **CRITERIA**

- Assess continuing education requirements of nursing personnel.
- Develop a unit base continuing education programme which reflects needs identified.
- Co-ordinate the programme to ensure efficient utilisation and participation of resource persons.
- Disseminate information re Unit lectures to other clinical areas via the Co-ordinator of Clinical Nursing Practice.
- Disseminate information re Divisional continuing education programmes and encourage nursing personnel to attend.
- Relay information re changes in policy or procedures relating to electronic and mechanical equipment.
- Maintain records of educational programmes provided at ward level.
- Act as a resource person for nurses seeking information about professional development and further information.

## **COMMUNICATION**

### **STANDARD 1**

**Develop and maintain an effective communication network with all customers.**

#### **CRITERIA**

- Recognise the role of members of the Health Care Team, the patient and significant others by establishing constructive relationships and involving them in decision making.
- Facilitate opportunities for effective communication with all customers and adheres to the Media Policy.
- Attend ward meetings and participate in committees as required.
- Contribute to the establishment, maintenance and closure of accurate and current patient records.
- Ensure that written communication is comprehensive, legible, concise objective and written chronologically to reflect changes in the patients condition and complies with policy.
- Maintain confidentiality of information.

# **CLINICAL PRACTICE**

## **STANDARD 1**

**Perform nursing practice in accordance with the guidelines documented in the Procedure Manual of the Nursing Service.**

### **CRITERIA**

- Practice within own abilities and qualifications.
- Liaise with members of the Health Care Team to plan appropriate patient care.
- Review Policies and Procedures specific to the unit speciality to ensure optimal nursing care is delivered.
- Complete training and practice according to unit specific criteria.

## **STANDARD 2**

### **CRITERIA**

- Demonstrate in the delivery of care an awareness of safety.
- Comply with the Occupational Health and Safety Act.
- Comply with all fire, and resuscitation procedures and regulations.
- Provide a comfortable environment for patients.
- Observe and protect the right to dignity, privacy and respect for all patients staff and significant others.
- Understand the principles of infection control, identifies risks to patients and significant others and responds appropriately to achieve optimal outcome.

## **STANDARD 3**

**Initiate a comprehensive nursing assessment of patients needs.**

### **CRITERIA**

- Use a systematic approach in assessment.
- Assess the health and functional status of patients through interaction, observation and measurement.

## **CLINICAL PRACTICE (Continued)**

### **STANDARD 4**

**Formulate a plan of care involving the patient and significant others**

#### **CRITERIA**

- Develop and document a plan of nursing care.
- Identify expected outcome including a timeframe for achievement.
- Initiate the discharge planning process on admission.

### **STANDARD 5**

**Implement planned care**

#### **CRITERIA**

- Apply scientific principles when providing nursing care.
- Initiate opportunities for health education.

### **STANDARD 6**

**Monitor and evaluate nursing practice.**

#### **CRITERIA**

- Use information and management systems which enable nursing practice to be evaluated at unit level

# **PROFESSIONAL AND ETHICAL PRACTICE**

## **STANDARD 1**

**Adherence to Nursing ,Hospital, Area and Department of Health Policies, Goals and Objectives.**

### **CRITERIA**

- Comply with all NSW. Government Statutes relevant to the organisation.
- Has knowledge of the legal implications of actions taken in nursing practice.
- Participate in the review and formulation of policies, protocols and procedures relevant to level of expertise.

## **STANDARD 2**

**Demonstrate accountability for nursing practice.**

### **CRITERIA**

- Accept responsibility for nursing practice and ensures nursing practice is within individuals expertise.
- Maintain current registration and provide annual registration documentation.
- Maintain a professional image at all times.
- Comply with the Code of Conduct for nurses.

I have read the job description and fully understand my role.

\_\_\_\_\_  
**(Signature of employee)**

\_\_\_\_\_  
**(date)**

\_\_\_\_\_  
**(Signature of Nurse Manager)**

\_\_\_\_\_  
**(date)**

## **APPENDIX THREE**

**Ethics Approval from Western Sydney Area Health Service**

# **WESTERN SYDNEY AREA HEALTH SERVICE**

## **HUMAN RESEARCH ETHICS COMMITTEE**

Westmead Hospital  
Westmead, NSW 2145  
Australia

Research Office  
Telephone: 633 8183  
Fax: 633 8194

In reply please quote:  
Hs.sb HREC95/8/4.11

**Committee Members:**

**Professor Stephen Leeder**  
Chairman  
Professor of Public Health

**Dr Howard Smith**  
Secretary  
Medical Graduate -  
Endocrinologist

**Rev Anthony Baker**  
Minister of Religion

**Mr Donald Champion**  
Lawyer

**Dr Stephen Clarke**  
Medical Oncologist

**Dr Michael Cole**  
Neonatal Pediatrician

**Ms Deborah Drummond**  
Clinical Trials Pharmacist

**A/Professor Michael Fearnside**  
Neurological Surgeon

**Mr Peter Herlinger**  
Layman

**Ms Vivien Lane**  
Manager - Nursing Research  
& Professional Development  
Unit

**Ms Jillian Gwynne-Lewis**  
Patient Representative

**Professor Sydney Nade**  
Clinical Professor

**Professor D Murray Walker**  
Dental Clinical School

**Miss Freda Whitlam**  
Laywoman

4 September 1995

Ms M Dillon  
54 Kareena Road  
Miranda  
NSW 2228

Dear Ms Dillon

re: Research Proposal: 'Determining the Role of the Clinical Nurse  
Educator in New South Wales'

I am pleased to inform you that, at its meeting on Tuesday 29th August 1995, the Western Sydney Area Health Service Human Research Ethics Committee were happy to approve your research proposal.

The Committee requested you provide the Consent Form on the letterhead of the Western Sydney Area Health Service.

Please note that approval of this proposal applies to the ethical content of the trial and individual arrangements should be negotiated with heads of diagnostic departments in those situations where the use of their resources is involved. The Committee requests you notify them of the commencement date of the study or the date which subjects are recruited. In accordance with the NH&MRC Statement on Human Experimentation 'Supplementary Note 1', the Committee requires you to furnish it with a brief report on progress at the end of 12 months.

In future correspondence, please quote your approval number : HREC95/8/4.11.

The Committee wishes you well with your project.

Yours sincerely

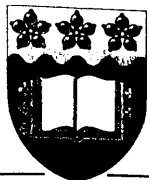


Dr Howard Smith  
Secretary  
Western Sydney Area Health Service  
Human Research Ethics Committee  
Encls.

## **APPENDIX FOUR**

Ethics Approval from the University of Wollongong Human Ethics  
Committee





UNIVERSITY OF WOLLONGONG  
Office of the Vice-Principal (Administration)

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Academic & Student Services Branch

In reply please quote: DC:KM HE95/141  
Further Information: Karen McRae (Ext 4457)

2 August 1995

Ms Michelle Dillon  
Primrose House  
PO Box 430  
Kogarah NSW 2217

Dear Michelle,

Thank you for your response to the Committee's requirements for your Human Research Ethics application HE95/141 "Preceived Compentencies for Clinical Nurse Educators".

Your response meets with the requirements of the Committee and your application is now formally approved.

Chairperson  
Human Research Ethics Committee

cc. Head, Nursing

## **APPENDIX FIVE**

### **Criteria for Expert Status**

The following is criteria for inclusion of experts to the Delphi Rounds.

1. Known as a professional nurse. Known by peers as an expert in nursing and/or nursing education.
  2. Representative of the major stakeholders:
    - Teachers of CNEs;
    - Industrial bodies;
    - Professional bodies;
    - Employers;
    - Managers.
  3. Experts must understand what a CNE is and what is there expected role.
  4. Experts must have regular \* contact with at least three to five CNEs.
    - Work with CNEs closely on a daily / weekly basis;
    - Manage CNEs;
    - Teach CNEs ;
    - Give professional / industrial support to CNEs;
    - Give educational support to CNEs;
    - Be responsible for performance appraisals of CNEs.
- \* Regular is defined as contact with a CNE weekly, or more regularly. Contact includes talking to them about their role, managing them, giving support or advice to them or working with them in a clinical or educational role.

## **APPENDIX SIX**

### **Criteria for CNE Inclusion**

The following is the criteria used for including Clinical Nurse Educators into the Survey

1. Permission given from Director of Nursing to approach CNE.
  2. This permission included names and contact details of CNE. The Director of Nursing must have given clear indication that the person was undertaking the role of a CNE and understood the definition of CNE as given in the Survey. \*
  3. Three major sub categories identified of CNEs. CNEs must fit into one of these sub categories:
    - CNEs known by other work titles;
    - CNEs working on one ward / unit;
    - CNEs working with a specific population.
  4. All CNEs spoken too directly regarding their role.
  5. Job description reviewed with CNEs prior to final inclusion.
- \* Registered Nurse employed in a health facility to carry out clinical teaching and/or coordinate all clinical teaching activities for trained nursing staff. This is to be their main activity while employed, and the RN must be supernumerary while carrying out this role.

**APPENDIX SEVEN**

**Round 1 Delphi Booklets**

**PERCEIVED COMPETENCIES  
OF A  
CLINICAL NURSE EDUCATOR**

**ROUND ONE**

**THE DELPHI TECHNIQUE**

**MICHELLE DILLON**

## PARTICIPANT INFORMATION SHEET:

### ***"Perceived Competencies of a Clinical Nurse Educator"***

#### **1st Round**

Thank you for agreeing to be a member of the expert panel, and for participating in this research project. Please fill in the following booklet with a blue or black pen. Return the booklet to me by ....., in the enclosed stamped addressed envelope. It is important that all booklets are returned to me by this date, so the information can be collated and returned to you for the second round of the Delphi.

Please read the information provided on this sheet. This will help you to fill out the form as quickly as possible. It is anticipated that this form will take 15-30 minutes to complete.

The aim of this research project is to **"Define and delineate the role of the Clinical Nurse Educator."** To define a role, it is often considered best to define the competencies required to fulfil that role. The competencies required will then structure the role. The Delphi method has been chosen as the first line methodology in the research project for various reasons. The main reason, is that the Delphi allows the experts of a profession to give freely of their ideas and thoughts without the disadvantages of small group discussions.

In the first round you are asked to think of any competency that you feel a Clinical Nurse Educator requires to fulfil their role. The second round will be a combination of these competencies. In the second, and future rounds you will be required to grade the competencies, in their order of significance.

This is where consensus becomes important. Any competency that is graded above 3 on the Likert scale will be included in the next round. You will also be given a summary of comments made, and the average score of the competency to assist you. Any comments that you wish to make regarding the competencies or technique will be extremely useful to the research.

Complete confidentiality will be maintained at all times. The forms sent out will be coded and your names will be kept confidential at all times.

**POINTS TO NOTE TO ASSIST YOU ARE:-**

1. **For the purpose of this research project a Clinical Nurse Educator is defined as:-**

"A nurse employed by a facility to carry out clinical teaching and / or coordinate clinical teaching activities. They are employed solely for this purpose." This definition excludes clinical facilitators employed by universities and other educational bodies to support nursing students.

- 2 **A competency is defined as:-**

"A requirement of performance which comprises of the knowledge / skill / humanistic qualities and the application of that knowledge, skill and humanistic qualities within a profession to the standard of performance required in employment." [NTB 1991 & Carmen 1991]

3. **5 categories of practice have been identified** as major components of a clinical educator's role. If you disagree with the categories, please comment on the categories you feel would be more suitable to this position.

4. **Please write as many competencies / skills** you feel are necessary under each heading. Do not worry about the wording at this moment, your thoughts and ideas are more important in this 1st round.

5. **An example under each category is provided** to assist you. These examples are for Nursing Unit Managers, and are taken from Christine Duffield's 1989 work on the competencies of Nursing Unit Mangers.

If you require any more information please do not hesitate to call me on 525-2294 (H)  
or 583-1077 (W)

Michelle Dillon

**PLEASE CONTINUE:**

## DELPHI TECHNIQUE INFORMATION SHEET

The Delphi technique is a quantitative method of research which aims to structure group opinion and discussion, without the group ever having to meet face to face. [Goodman 1987, 729] This technique can be used when accurate information is unavailable or expensive to obtain. It is also excellent when no research, or little research has been carried out on the subject as it allows an explorative approach to the un-researched subject topic. [Williams & Webb 1994 & Linstone & Turoff 1975, 10]

This research technique has a flexibility which allows considerable diversity in its application. It has several advantages, many of which are related to the fact that it provides consensus of expert opinion, without the bias which can readily occur in comparable techniques such as small group discussions.

A panel or group of experts is formed, based on their experience of the topic being studied. The use of a panel relies upon the belief that within professions there will be an inbuilt knowledge of the problems, and the parameters of professional practice. [Raven & Walters quoted in Duffield 1989,998]

After a panel is formed, consent is obtained and panel members are informed of what is required of them, all members are required to carry out the same tasks. The members may be required to write skill lists that they perceive are necessary for one professional role, rate research priorities or answer a series of questions. [Duffield 1989]

This is the first round of the technique. The individual responses of the panel are scrutinized and collated by the researcher, who then compiles a comprehensive list for re-submission to the panel. [William & Webb 1994, 181] Their own responses are returned to them along with the panels feedback. The panel members are usually asked to rank or grade items in levels of importance or significance in the next or subsequent rounds.

Statistical analysis usually takes place where items are ranked according to their median and percentage scores as decided by group responses on Likhart scales. [Goodman 1987, 730] Consensus is reached usually within, two or at the most three rounds. [Duffield 1993, 228]

**CLINICAL:**

This category is the clinical component of the Clinical Nurse Educator's role. What competencies does he / she need to possess in the **clinical field** to work effectively as a Clinical Nurse Educator.

**E.G. Ability to set priorities for patient care.**

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



**EDUCATIONAL:**

This category is the educational component of the Clinical Nurse Educator's role. What educational competencies / abilities does he / she need to possess to fulfil the role of Clinical Nurse Educator effectively.

**E.G. The ability to orientate new staff members to the ward area.**

[illegible]

## INTERPERSONAL:

This category is the interpersonal component of the Clinical Nurse Educator's role. What interpersonal competencies / skills does a Clinical Nurse Educator require to fulfil their role effectively.

**E.G. Ability to communicate with all members of the health care team.**

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**MANAGERIAL:**

This category is the management component of the Clinical Nurse Educator's role. What managerial abilities / competencies does he / she need to possess to fulfil the role of Clinical Nurse Educator effectively.

**E.G. Prepares unit budget.**

[illegible]

## PROFESSIONAL:

This category is the professional component of the Clinical Nurse Educator's role. What professional competencies / abilities should a person have to fulfill the role of Clinical Nurse Educator effectively.

E.G. Encourages growth of ideas among staff.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## DEMOGRAPHIC QUESTIONS:

The following are demographic questions which will assist with the research hypothesis. Your answers will be treated in the strictest confidence, and will be stored away from your booklets. Once the information is analysed, this page will be destroyed.

**Please circle the correct answer / s below:**

**AGE:**            21-30 yrs  
                      30-39 yrs  
                      40-49 yrs  
                      50-thereafter

**GENDER:**  
                      Male   -        Female

**HIGHEST QUALIFICATION:**

Certificate of Nursing  
Degree                        -        Nursing  
   -        Non Nursing .....  
Graduate Diploma  
Masters  
Ph. D  
Other .....

**NUMBER OF CNE's IN CONTACT WITH:**

1 - 5  
6 - 10  
11 - 15  
16 - 20  
20 - or more

**University of Wollongong**  
**Human Research Ethics Committee**

**Consent Form:**

Research Title

**“Perceived Competencies for Clinical Nurse Educators”**

Researcher's Name

**Michelle Dillon**

This research project is being conducted as part of a Honours Master Degree of Nursing supervised by Ms Judith Leacock and Ms Rhonda Griffiths in the Department of Nursing at the University of Wollongong.

The research will include the use of the **Delphi technique** with between 3 - 5 rounds distributed to a panel of experts. The rounds will require you to write and rank the competencies you perceive are expected of a CNE to fulfill their role.

**You are free to withdraw from the research at anytime without penalty.**

If you have any enquires regarding the conduct of the research please contact the Secretary of the University of Wollongong Human Research Ethics Committee on (042) 213-079.

I understand that the data collected will be used for the purpose of research only, and I consent for the data to be used in that manner.

If you wish to take part in this research please sign below:

Signature: .....

Date: .....

**APPENDIX EIGHT**

**Round 2 Delphi Booklets**

**PERCEIVED COMPETENCIES  
OF A  
CLINICAL NURSE EDUCATOR  
ROUND TWO**

**THE DELPHI TECHNIQUE**

**MICHELLE DILLON**

PARTICIPANT INFORMATION SHEET:  
***“Perceived Competencies of a Clinical Nurse Educator”***  
**2nd Round**

Thank you for returning round one and progressing to round two. Please fill in the following booklet and return the booklet to me by **1st October 1995**, in the enclosed stamped addressed envelope. It is important that all booklets are returned to me by this date to allow analysis to occur.

Please read the information provided on this sheet. This will help you to fill out the form as quickly as possible. It is anticipated that this form will take approximately 30 minutes to complete. I am aware that the document appears lengthy, this is due to the richness of the data from the first round.

In the first round you were asked to think of any competency that you felt a Clinical Nurse Educator required to fulfil their role. The second round, is a combination of all the competencies that participating panel members thought were essential for the role. If a statement appeared more than twice in the first round, then I have endeavoured to include it in the second round.

Please examine these competencies and rank them in levels of importance to the role of CNE.

The scale is as follows:-

- |    |            |                               |   |   |
|----|------------|-------------------------------|---|---|
| 1. | <b>IRR</b> | Irrelevant to the role of CNE | - | This competency is not what is required of a CNE.       |
| 2. | <b>NE</b>  | Not essential                 | - | This competency is not essential for a CNE.             |
| 3. | <b>D</b>   | Desirable                     | - | This competency is desirable, but not essential.        |
| 4. | <b>HD</b>  | Highly Desirable              | - | This competency is highly desirable, but not essential. |
| 5. | <b>ESS</b> | Essential                     | - | This competency is essential for a CNE.                 |

The last page is a pre determined list of educational / clinical pre requisites for Clinical Nurse Educators, you are requested to agree if they are essential or irrelevant.



The competency statements reflect the data that was obtained from the first round. The ANCI Registered Nurse competency statements (1993) and the ANTS Nurse Teacher competency statements, were used as reference for the second round.

The five domains remain, with reflective practice added. Once again this was due to the data. Some of the competency statements and elements however may cross the domains. There is a section at the end of each domain for you to comment. Please free to add any competencies you feel have been left out, or to make any comments about the competencies in the domain.

The data from this round will undergo factor analysis, and then will be used as a basis for a survey of Clinical Nurse Educators within NSW. The survey will examine the link between the panel of "experts" expected competencies of a CNE, and practising Clinical Nurse Educators perceived competencies of their role.

Thank you once again for taking the time to complete the 2nd round booklet. Your input has been extremely beneficial to my research project.

If you require any more information please do not hesitate to call me on  
525-2294 (H) or 583-1077 (W)



Michelle Dillon

#### References:

- |      |      |   |
|------|------|---|
| ANCI | 1993 | National Competencies for Registered Nurses in recommended domains. |
| ANTS | 1994 | Nurse Teacher Competency Statements.                                |

PLEASE CONTINUE:

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## CLINICAL DOMAIN

		IRR	NE	D	HD	ESS
<b>COMPETENCY NO 1:</b>	<b>Demonstrates and maintains clinical expertise.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Demonstrates a deep understanding of all aspects of clinical nursing care.					
<b>Elements:</b>	A) Respected by peers within the clinical area to be clinically credible. B) Delivers a high standard of nursing care. C) Has an accurate and competent knowledge of the area in which they are educating.					
<b>COMPETENCY NO. 2:</b>	<b>Demonstrates an accurate and comprehensive knowledge of nursing policies, practices and standards, particular to the area in which they are educating.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Possess knowledge of hospital and ward policies and standards of practice. Is able to then teach these practices to new staff.					
<b>Elements:</b>	A) Is familiar with hospital policies for clinical care, ie telephone orders B) Is familiar with new emerging nursing policies.					
<b>COMPETENCY NO. 3:</b>	<b>Demonstrates role model / mentor characteristics:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Acts as a professional and clinical role model to other staff.					
<b>Elements:</b>	A) Acts as a role model - demonstrates critical thinking / problem solving etc. B) Acts as a patient / staff advocate. C) Questions treatment of patient as appropriate.					
<b>COMPETENCY NO. 4:</b>	<b>Maintains a high level of technological skill and understanding.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Knows and understands how different pieces of machinery function, and is able to impart this knowledge.					
<b>Elements:</b>	A) Actively seeks updates on new technology B) Has a high level of technological know how. C) Is able to use equipment effectively.					

**COMPETENCY NO. 5:**      **Demonstrates a wide and comprehensive knowledge of nursing care.**

1      2      3      4      5

**Verbal Description:**      Has a wide, accurate and up to date knowledge of nursing issues, clinical care, relevant medical interventions and relevant nursing interventions.

- Elements:**
- A)      Has an understanding of the legal aspects of nursing interventions.
  - B)      Demonstrates expert nursing knowledge and practice as a basis for teaching.
  - C)      Has an understanding of pharmacological aspects of speciality.

**COMMENTS:**

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## EDUCATIONAL DOMAIN

**COMPETENCY NO. 6:**      **Demonstrates knowledge of adult learning principles.**

1      2      3      4      5

**Verbal Description:**      Uses the principles of adult learning to provide educational support to staff.

- Elements:**
- A)      Understands how an adult learns.
  - B)      Understands the learning process.
  - C)      Understands the possible causes of learning difficulties in an adult.
  - D)      Uses these principles as a basis for all educational programs.

**COMPETENCY NO. 7:** Applies educational strategies to assess individuals and groups.

**Verbal Description:** Uses acceptable professional standards of practice to assess the competence of staff members.

- Elements:**
- A) Completes formal assessments of staff members.
  - B) Assesses clinical skills of individuals.
  - C) Has the ability to assess for prior knowledge.

**COMPETENCY NO. 8:** Identifies skills deficits within a clinical area.

**Verbal Description:** Is able to identify the learning needs of a group or individual staff members.

- Elements:**
- A) Carries out needs analysis or skills audits.
  - B) Has the ability to identify deficits of knowledge and skills in staff members.

**COMPETENCY NO. 9:** Formulates plans for educational programs within the clinical area.

**Verbal Description:** Plans for appropriate educational events within the clinical area.

- Elements:**
- A) Produces an in-service calendar.
  - B) Plans formal teaching events.
  - C) Has an orientation plan.

**COMPETENCY NO. 10:** Develops, and implements planned educational programs (Informal & Formal).

**Verbal Description:** Develops educational programs and implements them within the clinical area as appropriate.

- Elements:**
- A) Implements educational programs as needed and as appropriate.
  - B) Establishes active educational ward based programs.
  - C) Prepares for future developments within the ward and the organisation.

**COMPETENCY NO. 11:** Evaluates effectiveness of educational strategies and implements changes as required.

**Verbal Description:** Evaluates all educational programs and education carried out by self and others.

- Elements:**
- A) Evaluates all programs and gives feedback to educators if applicable.
  - B) Implements changes in educational programs on the basis of feedback.

		IRR	NE	D	HD	ESS
<b>COMPETENCY NO. 12:</b>	<b>Utilises a variety of teaching methods as required.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Has the ability to differentiate the need to educate on an individual level, or on a group level, as appropriate.					
<b>Elements:</b>	A) Teaches in a small group. B) Uses a variety of teaching resources ie, overhead / slides / video					
<b>COMPETENCY NO. 13:</b>	<b>Provides effective and constructive feedback to learners, peers and other stakeholders.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Monitors learners' progress and provides feedback at appropriate times. This may be negative or positive feedback.					
<b>Elements:</b>	A) Liaises with clinical preceptors as to staff's progress. B) Gives feedback on procedures or skills carried out.					
<b>COMPETENCY NO. 14:</b>	<b>Engages effectively in clinical teaching.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Uses appropriate methods to teach in the clinical field.					
<b>Elements:</b>	A) Has the ability to demonstrate procedures. B) Has the ability to capture the moment and seek potential learning opportunities. C) Has the clinical knowledge to teach in the clinical area.					
<b>COMPETENCY NO. 15:</b>	<b>Educates at an appropriate level, with a high degree of skill.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Has the ability to teach in a classroom setting.					
<b>Elements:</b>	A) Able to impart knowledge to a large group of people. B) Has excellent presentation skills.					
<b>COMPETENCY NO. 16:</b>	<b>Demonstrates the ability to link theory with practice.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Has the ability to link academic theory with clinical practice.					
<b>Elements:</b>	A) Able to demonstrate involvement of theory in practice B) Demonstrates how theory relates to practice					

**COMPETENCY NO. 17:** Possesses knowledge of educational opportunities within, and external to the organisation.

1 2 3 4 5

**Verbal Description:** Has a wide knowledge of the various courses offered through the various higher education institutes, such as the College of Nursing and Universities.

**Elements:**

- A) Has an extensive knowledge of relevant post basic courses.
- B) Is able to access information regarding the courses.
- C) Assists the staff member to apply for positions within the courses.

**COMPETENCY NO. 18:** Responsive to new and innovative ideas.

1 2 3 4 5

**Verbal Description:** Is open to new and often 'different' ideas on how to educate and / or practice.

**Elements:**

- A) Has the ability to identify the potential for "new" nursing procedures.
- B) Has an innovative approach to education.
- C) Has the ability to be dynamic and innovative when approaching clinical problems.

**COMPETENCY NO. 19:** Enhances the motivation of staff to learn.

1 2 3 4 5

**Verbal Description:** Has the ability to motivate staff to learn through various methods.

**Elements:**

- A) Encourages staff to attend lectures / teaching programs
- B) Is enthusiastic about learning.
- C) Encourages staff to be self directed.

**COMMENTS:**

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## MANAGEMENT DOMAIN:

		IRR	NE	D	HD	ESS
<b>COMPETENCY NO. 20:</b>	<b>Effectively plans and prioritises education.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Plans educational events, and prioritises them in order of importance. Develops specific goals and strategies.					
<b>Elements:</b>	A) Completes projects on time. B) Sets priorities of education with manager. C) Has an understanding of the clinical context in which education takes place.					
<b>COMPETENCY NO. 21:</b>	<b>Utilises time effectively and efficiently.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Demonstrates effective time management skills.					
<b>Elements:</b>	A) Able to manage time effectively. B) Is able to assist the learner to manage their time effectively.					
<b>COMPETENCY NO. 22:</b>	<b>Utilises resources effectively and efficiently.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Uses human, environmental and educational resources to facilitate education.					
<b>Elements:</b>	A) Encourages use of the right resources. B) Accesses the correct personnel for reference. C) Has knowledge of budgetary allocations within the area.					
<b>COMPETENCY NO. 23:</b>	<b>Demonstrates effective organisation skills.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Uses organisational skills to plan and implement both informal and formal educational events.					
<b>Elements:</b>	A) Has an understanding of the ward area and the limitations placed upon it. B) Is able to plan educational events taking into effect all variables.					

**COMPETENCY NO. 24:** Maintains accurate records and documentation.

**Verbal Description:** Maintains accurate records and documentation of all personal, and ward educational practices.

- Elements:**
- A) Prepare appropriate reports for management.
  - B) Keeps an in service record.
  - C) Keeps records of teaching events.

**COMPETENCY NO. 25:** Actively participates in relevant committees.

**Verbal Description:** Is an active member of appropriate committees such as nursing practice committee and education committee.

- Elements:**
- A) Member of Education Committee
  - B) Reports back to the ward area of committee happenings.

**COMMENTS:**

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### INTERPERSONAL DOMAIN:

**COMPETENCY NO. 26:** Communicates effectively and appropriately.

**Verbal Description:** Uses effective communication skills with both clients and staff. This communication must be both written and verbal.

- Elements:**
- A) Communicates at an appropriate level for patients and staff.
  - B) Ability to communicate with management.



		IRR	NE	D	HD	ES
		1	2	3	4	5
<b>COMPETENCY NO. 27:</b>	<b>Establishes, and maintains collaborative relationships with all members of the health care team.</b>					
<b>Verbal Description:</b>	Uses interpersonal skills and techniques to maintain interdependent relationships.					
<b>Elements:</b>	A) Demonstrates excellent liaison skills with clients and staff. B) Has the ability to relate to all members of the team.					
<b>COMPETENCY NO. 28:</b>	<b>Establishes and maintains an approachable and empathic relationship with all staff members.</b>					
<b>Verbal Description:</b>	Is approachable and empathic at all times, to all staff members.					
<b>Elements:</b>	A) Has a non threatening or non judgmental approach. B) Expresses empathy towards a new learner. C) Is fair and objective.					
<b>COMPETENCY NO. 29:</b>	<b>Demonstrates ability to manage and resolve conflict.</b>					
<b>Verbal Description:</b>	Manages conflict effectively.					
<b>Elements:</b>	A) Able to manage conflict and aggression B) Instigates conflict resolution as necessary					
<b>COMPETENCY NO. 30:</b>	<b>Utilises effective counselling strategies to assist colleagues.</b>					
<b>Verbal Description:</b>	Provides counselling to relevant staff as needed.					
<b>Elements:</b>	A) Carries out performance counselling with manager and staff member. B) Counsels staff over professional issues.					

**COMMENTS:**

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## PROFESSIONAL DOMAIN:

		IRR	NE	D	HD	ESS
<b>COMPETENCY NO. 31:</b>	<b>Maintains and updates personal professional development.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Demonstrates a commitment to personal professional development.					
<b>Elements:</b>	A) Attends conferences & seminars in area of expertise B) Develops and maintains professional inquisitiveness. C) Displays a commitment to personal ongoing education.					
<b>COMPETENCY NO. 32:</b>	<b>Demonstrates commitment to professional organisations.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Is an active member of appropriate professional organisations.					
<b>Elements:</b>	A) Belongs to one or more professional organisations. B) Participates actively within professional organisations.					
<b>COMPETENCY NO. 33:</b>	<b>Demonstrates a professional attitude.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	At all times is professional in manner and attitude.					
<b>Elements:</b>	A) Displays ethical behaviour. B) Maintains confidentiality. C) Has a high professional standard.					
<b>COMPETENCY NO. 34:</b>	<b>Actively encourages and promotes the professional development of other staff members.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Acts to enhance the professional development of other nurses.					
<b>Elements:</b>	A) Encourages membership of professional organisations. B) Gives appropriate career advice.					
<b>COMPETENCY NO. 35:</b>	<b>Demonstrates an understanding of the structure and function of the Health Care system.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Possesses knowledge of the organisational structure he/she works within and the structure and function of the NSW Health System.					
<b>Elements:</b>	A) Has a broad knowledge of The NSW Health System. B) Has a knowledge and understanding of the role of other health providers.					

**COMPETENCY NO. 36:** Displays a confident manner and clear speech.

**Verbal Description:** Appears confident and able to perform the role of educator.

**Elements:**

- A) Has a confident manner.
- B) Is articulate.
- C) Has the confidence to clearly outline staffs strengths and weaknesses.

**COMPETENCY NO. 37:** Ensures that physical appearance is appropriate when at work.

**Verbal Description:** Wear uniform or appropriate clothes at all times.

**Elements:**

- A) Wears uniform.
- B) Wears minimum jewellery.

**COMMENTS:**

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### REFLECTIVE PRACTICE DOMAIN:

**COMPETENCY No. 38:** Engages in reflective practice.

**Verbal Description:** Assess own abilities independently, comprehensively and accurately.

**Elements:**

- A) Uses reflective practice to enhance performance.
- B) Uses reflective practice to initiate change.
- C) Uses reflective practice as a teaching strategy.

		IRR	NE	D	HD	E
<b>COMPETENCY NO. 39:</b>	<b>Demonstrates knowledge of nursing research.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Possesses knowledge of research methodologies and current nursing research specific to his/her nursing speciality.					
<b>Elements:</b>	A) Reads relevant literature, both clinical and educational. B) Identifies problems / issues within nursing practice which may be resolved by nursing research.					
<b>COMPETENCY NO. 40:</b>	<b>Incorporates research into practice.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Incorporates new knowledge gleaned from research into clinical / educational practice.					
<b>Elements:</b>	A) Suggests changes to nursing practice on the basis of research findings. B) Suggests research projects to validate new ideas / practices.					
<b>COMPETENCY NO. 41:</b>	<b>Conducts and contributes to nursing research.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Verbal Description:</b>	Initiates and / or contributes to clinical nursing research.					
<b>Elements:</b>	A) Carries out nursing research projects within the clinical area as the major researcher. B) Is a co-joint researcher for nursing research. C) Submits research proposals to management.					

**COMMENTS:**

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# LIST OF PRE REQUISITES FOR CLINICAL NURSE EDUCATORS:

	IRR	NE	D	HD	ESS
<b>Registered Nurse</b>	1	2	3	4	5
Evidence of continuing education ie seminars	1	2	3	4	5
<b>Post Basic Certificate</b> in area of Speciality	1	2	3	4	5
Bachelors <b>Degree</b> in Nursing	1	2	3	4	5
Non Nursing <b>Degree</b>	1	2	3	4	5
Post Graduate <b>Certificate</b> - Nursing	1	2	3	4	5
Post Graduate <b>Certificate</b> - Nursing Education	1	2	3	4	5
Post Graduate <b>Certificate</b> - Education	1	2	3	4	5
Post Graduate <b>Certificate</b> - Non Nursing	1	2	3	4	5
Post Graduate <b>Diploma</b> - Nursing	1	2	3	4	5
Post Graduate <b>Diploma</b> - Nursing Education	1	2	3	4	5
Post Graduate <b>Diploma</b> - Education	1	2	3	4	5
Post Graduate <b>Diploma</b> - Non Nursing	1	2	3	4	5
<b>Masters Degree</b>	1	2	3	4	5
<b>3 Years</b> clinical experience	1	2	3	4	5
<b>5 Years</b> clinical experience	1	2	3	4	5
<b>7 Years</b> and above clinical experience	1	2	3	4	5

**University of Wollongong**  
**Human Research Ethics Committee**

**Consent Form For:**

**“Perceived Competencies for Clinical Nurse Educators”**

Researchers's Name

**Michelle Dillon**

This research project is being conducted as part of a Honours Master Degree of Nursing supervised by Ms Judith Leacock and Ms Rhonda Griffiths in the Department of Nursing at the University of Wollongong.

The second part of the research project includes the use of a Survey. The Survey will require you to state whether the competencies, that have generated by previous Delphi rounds with a team of experts, are what you perceive are required by a Clinical Nurse Educator / Educator in the Clinical area, to fulfill their role. Please write down any competencies you feel are necessary to the role, but which are not there.

**You are free to withdraw from the research at anytime.**

If you have any enquire's regarding the conduct of the research please contact the Secretary of the University of Wollongong Human Research Ethics Committee on (042) 213-079.

I understand that the data collected will be used for the purpose of research only, and I consent for the data to be used in that manner.

If you wish to take part in this research please sign below.

Signature: .....

Date: .....

**APPENDIX NINE**

**Survey Booklet**

**PERCEIVED COMPETENCIES**

**OF A**

**CLINICAL NURSE EDUCATOR**

**SURVEY**

**MICHELLE DILLON**

## PARTICIPANT INFORMATION SHEET:

### ***“Perceived Competencies of a Clinical Nurse Educator Within New South Wales”***

Thank you for agreeing to participate in this research project. Please read the information provided on this sheet as this will assist you to fill out the form as quickly as possible. It is anticipated that this form will take between 15-30 minutes to complete. Please ensure that you have filled out the consent form at the end of the booklet, as your data is unable to be used unless the consent form is completed.

The aim of this research project is to **“Define and Delineate the role of the Clinical Nurse Educator.”** To define a role, it is often considered best to define the competencies required to fulfil that role. The competencies required will then structure the role.

To generate the competencies that are within the booklet a panel of expert educators and managers were used. The panel members were requested to write what competencies they felt, were required to fulfill the role of Clinical Nurse Educator at first. The second round was then sent to them, which required them to rate the collated competencies in levels of significance. The 24 competencies that are in the survey all were rated essential or highly desirable by this panel of experts.

In this survey, you are **asked to agree or disagree, whether each competency is required by a Clinical Nurse Educator / Educator in a Clinical Area, to fulfil their role.** Your personal feeling are what is asked for. You are also asked to write any competencies or skills, that you feel, are missing from the survey that a Clinical Nurse Educator requires to fulfill their role. Your job description may be a guide to assist you. However these descriptions may not be what you feel are the requirements of the role.

Complete confidentiality will be maintained at all times throughout the project . The booklets sent out to you will be coded, to allow me to ensure that all responses are returned. Your names and areas of work will be kept confidential at all times, and your responses will not be linked to you or to your workplace.



## POINTS TO ASSIST YOU:-

1. **For the purpose of this research project a Clinical Nurse Educator / Educator in the Clinical Area is defined as:-**

"A nurse employed by a facility to carry out clinical teaching and / or coordinate clinical teaching activities. They are employed solely for this purpose." This definition excludes clinical facilitators employed by universities and other educational bodies to support nursing students. However it includes, Clinical Nurse Educators, Clinical Coordinators, Clinical Resources Nurses and other nurses by different titles.

- 2 **A competency is defined as:-**

"A requirement of performance which comprises of the knowledge / skill / humanistic qualities and the application of that knowledge, skill and humanistic qualities within a profession to the standard of performance required in employment." [NTB 1991 & Carmen 1991]

3. **6 categories of practice have been identified as:-**

Major components of a clinical educator's role. If you disagree with the categories, please comment on the categories you feel would be more suitable to this position.

If you require any more information please do not hesitate to call me on 525-2294 (H) or 583-0918 (W)

Michelle Dillon

## CLINICAL DOMAIN

**AGREE**

**DISAGREE**

**COMPETENCY NO 1:**

**Demonstrates a comprehensive knowledge of nursing care and clinical expertise.**

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**Verbal Description:**

Demonstrates an understanding of various aspects of clinical nursing care, and has an accurate and recent knowledge of nursing issues, clinical care, relevant medical, nursing and allied health interventions

**Elements:**

- A) Respected by peers within the clinical area to be clinically credible.
- B) Delivers a high standard of nursing care which is researched based.
- C) Demonstrates expert nursing knowledge and practice as a basis for teaching.

**COMPETENCY NO. 2:**

**Demonstrates an accurate and comprehensive knowledge of nursing policies, practices and standards, particular to the area in which they are educating.**

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☐

**Verbal Description:**

Possesses knowledge of hospital and ward policies and standards of practice. Is able to then teach these practices to new staff.

**Elements:**

- A) Is familiar with hospital policies for clinical care, ie telephone orders
- B) Is familiar with new emerging nursing policies.
- C) Develops research based policy & procedures.

**COMPETENCY NO. 3:**

**Demonstrates role model / mentor characteristics:**

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☐

**Verbal Description:**

Acts as a professional and clinical role model to other staff.

**Elements:**

- A) Acts as a role model - demonstrates critical thinking / problem solving etc.
- B) Acts as a staff advocate.
- C) Questions treatment of patient as appropriate.

**COMPETENCY NO. 4:**

**Maintains a high level of technological skill and understanding.**

☐
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**Verbal Description:**

Knows and understands technology, and is able to impart this knowledge.

**Elements:**

- A) Actively seeks updates on new technology.
- B) Has a high level of technological know how.
- C) Is able to use equipment effectively.

**COMMENTS ON THE CLINICAL DOMAIN:**

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## EDUCATIONAL DOMAIN

**AGREE**

**DISAGREE**

**COMPETENCY NO.5:**

**Verbal Description:**

**Demonstrates knowledge of adult learning principles.**

Uses the principles of adult learning to provide educational support to staff.

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**Elements:**

- A) Understands how an adult learns and the learning process.
- B) Understands the possible causes of learning difficulties in an adult.
- C) Motivates staff to be self directive, seeking learning opportunities etc

**COMPETENCY NO. 6:**

**Verbal Description:**

**Applies educational strategies to assess individuals and groups.**

Uses acceptable professional standards of practice to assess the competence of staff members, and identify skill deficits.

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**Elements:**

- A) Completes formal assessments of staff members, ie skill audits.
- B) Assesses clinical skills of individuals.
- C) Has the ability to assess for prior knowledge and identify deficits of knowledge and skills.

**COMPETENCY NO. 7:**

**Verbal Description:**

**Develops, implements and evaluates planned educational programs within the Clinical Area.**

Plans and develops specific clinical educational programs and implements them within the clinical area as appropriate.

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**Elements:**

- A) Implements educational programs as needed and as appropriate, ie in-service calendar
- B) Implements changes in educational programs on the basis of feedback.
- C) Prepares for future developments within the ward and the organisation.

		AGREE	DISAGREE
<b>COMPETENCY NO. 8:</b>	<b>Provides effective and constructive feedback to learners, peers and other stakeholders.</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Verbal Description:</b>	Monitors learners' progress and provides feedback at appropriate times. This may be negative or positive feedback.		
<b>Elements:</b>	A) Liaises with clinical preceptors as to staff's progress. B) Gives feedback on procedures or skills carried out. C) Liaises with the NUM regarding educational deficits.		
<b>COMPETENCY NO. 9:</b>	<b>Engages effectively in clinical teaching.</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Verbal Description:</b>	Uses appropriate methods to teach in the clinical field and has the ability to differentiate the need to educate on an individual level, or on a group level, as appropriate.		
<b>Elements:</b>	A) Has the ability to demonstrate procedures and clinical skills. B) Has the ability to capture the moment and seek potential learning opportunities. C) Uses a variety of teaching resources, ie videos/ overhead/ props		
<b>COMPETENCY NO. 10:</b>	<b>Demonstrates the ability to link theory with practice.</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Verbal Description:</b>	Has the ability to link academic theory with clinical practice.		
<b>Elements:</b>	A) Able to demonstrate involvement of theory in practice B) Demonstrates how theory relates to practice		
<b>COMPETENCY NO. 11:</b>	<b>Responsive to new and innovative ideas.</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Verbal Description:</b>	Is open to new and often "different" ideas on how to educate and / or practice.		
<b>Elements:</b>	A) Has the ability to identify the potential for "new" nursing procedures, based on research. B) Has an innovative approach to education. C) Has the ability to be dynamic and innovative when approaching clinical problems.		

**COMMENTS:**

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## MANAGEMENT DOMAIN:

AGREE

DISAGREE

**COMPETENCY NO. 12:**

**Verbal Description:**

**Effectively plans and prioritises education.**

Plans educational events, and prioritises them in order of importance.  
Develops specific goals and strategies.

☐☐

**Elements:**

- A) Completes projects on time.
- B) Sets priorities of education with manager.
- C) Has an understanding of the clinical context in which education takes place and the limitations of the clinical area.

**COMPETENCY NO. 13:**

**Verbal Description:**

**Utilises resources effectively and efficiently.**

Uses human, environmental and educational resources to facilitate education.

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**Elements:**

- A) Encourages use of the appropriate resources.
- B) Accesses the correct personnel for reference and consults with expert nurses / practitioners.
- C) Has knowledge of budgetary allocations within the area.

**COMPETENCY NO. 14:**

**Verbal Description:**

**Maintains accurate records and documentation.**

Maintains accurate records and documentation of all personal, and ward educational practices.

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**Elements:**

- A) Prepares appropriate reports for management.
- B) Maintains an in-service record.
- C) Keeps records of teaching events.

**COMPETENCY NO. 15:**

**Verbal Description:**

**Actively participates in relevant committees.**

Is an active member of appropriate committees such as nursing practice committee and education committee.

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**Elements:**

- A) Member of the Hospital Education Committee
- B) Reports back to the ward area of committee happenings.
- C) Active participant in Hospital resuscitation Committee

**COMMENTS:**

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## INTERPERSONAL DOMAIN:

AGREE

DISAGREE

**COMPETENCY NO. 16:**

**Verbal Description:**

**Communicates effectively and appropriately.**

Uses effective communication skills with both clients and staff.  
This communication must be both written and verbal.

☐☐

**Elements:**

- A) Communicates at an appropriate level for patients and staff.
- B) Has the ability to communicate with management.
- C) Utilises appropriate written material.

**COMPETENCY NO. 17:**

**Verbal Description:**

**Establishes, and maintains collaborative relationships with all members of the health care team.**

Uses interpersonal skills and techniques to maintain interdependent relationships.

☐☐

**Elements:**

- A) Demonstrates excellent liaison skills with clients and staff.
- B) Has the ability to relate to all members of the team.

**COMPETENCY NO. 18:**

**Verbal Description:**

**Demonstrates ability to manage and resolve conflict.**

Manages conflict effectively.

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**Elements:**

- A) Is able to manage conflict and aggression
- B) Instigates conflict resolution as necessary

**COMMENTS:**

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## PROFESSIONAL DOMAIN:

AGREE

DISAGREE

**COMPETENCY NO. 19:** Maintains and updates personal professional development.

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**Verbal Description:** Demonstrates a commitment to personal professional development.

**Elements:**

- A) Attends conferences & seminars in area of expertise
- B) Participates actively within professional organisations
- C) Displays a commitment to personal ongoing education.

**COMPETENCY NO. 20:** Demonstrates a professional attitude.

☐☐

**Verbal Description:** At all times is professional in manner and attitude.

**Elements:**

- A) Displays ethical behaviour.
- B) Maintains confidentiality.
- C) Has a high professional standard.

**COMPETENCY NO. 21:** Actively encourages and promotes the professional development of other staff members.

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**Verbal Description:** Acts to enhance the professional development of other nurses.

**Elements:**

- A) Encourages membership of professional organisations.
- B) Gives appropriate career advice.

**COMMENTS:**

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## REFLECTIVE PRACTICE DOMAIN:

AGREE

DISAGREE

**COMPETENCY No. 22:** Engages in reflective practice.

☐☐

**Verbal Description:** Assess own abilities independently, comprehensively and accurately.

**Elements:**

- A) Uses reflective practice to enhance performance.
- B) Uses reflective practice to initiate change.
- C) Uses reflective practice as a teaching strategy.
- D) Seeks feedback regarding own professional development or abilities.

**COMPETENCY NO. 23:** Demonstrates knowledge of nursing research.

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**Verbal Description:** Possesses knowledge of research methodologies and current nursing research specific to his/her nursing speciality.

**Elements:**

- A) Reads relevant literature, both clinical and educational.
- B) Identifies problems / issues within nursing practice which may be resolved by nursing research.

**COMPETENCY NO. 24:** Incorporates research into practice.

☐☐

**Verbal Description:** Incorporates new knowledge gleaned from research into clinical / educational practice.

**Elements:**

- A) Suggests changes to nursing practice on the basis of research findings.
- B) Suggests research projects to validate new ideas / practices.

**COMMENTS:**

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**LIST OF PRE REQUISITES FOR  
CLINICAL NURSE EDUCATORS / EDUCATORS IN THE CLINICAL AREA:**

- |   |                     |                          |
|---|---------------------|--------------------------|
| <b>Registered Nurse</b>                             |                     | <input type="checkbox"/> |
| Evidence of <b>continuing education</b> ie seminars |                     | <input type="checkbox"/> |
| <b>Post Basic Certificate</b> in area of Speciality |                     | <input type="checkbox"/> |
| Bachelors <b>Degree</b> in Nursing                  |                     | <input type="checkbox"/> |
| Post Graduate <b>Certificate</b>                    | - Nursing           | <input type="checkbox"/> |
| Post Graduate <b>Certificate</b>                    | - Nursing Education | <input type="checkbox"/> |
| Post Graduate <b>Certificate</b>                    | - Education         | <input type="checkbox"/> |
| Post Graduate <b>Diploma</b>                        | - Nursing           | <input type="checkbox"/> |
| Post Graduate <b>Diploma</b>                        | - Nursing Education | <input type="checkbox"/> |
| Post Graduate <b>Diploma</b>                        | - Education         | <input type="checkbox"/> |
| <b>Masters Degree</b>                               |                     | <input type="checkbox"/> |
| <b>3 Years</b> clinical experience                  |                     | <input type="checkbox"/> |
| <b>5 Years</b> clinical experience                  |                     | <input type="checkbox"/> |
| <b>7 Years</b> and above clinical experience        |                     | <input type="checkbox"/> |

## DEMOGRAPHIC QUESTIONS:

The following are demographic questions which will assist with the research hypothesis. Your answers will be treated in the strictest confidence, and will be stored away from your booklets. Once the information is analysed, the following pages will be destroyed.

Please Tick the Correct Answer / s Below:

YOUR POSITION TITLE: .....

YOUR AWARD GRADE:	CNS / CNE	<input type="checkbox"/>
	Nurse Educator Level 1	<input type="checkbox"/>
	Nurse Educator Level 2	<input type="checkbox"/>
	Nurse Educator Level 3	<input type="checkbox"/>
	Nurse Educator Level 4	<input type="checkbox"/>
	Other	<input type="checkbox"/>

YOUR AGE:	21-30 yrs	<input type="checkbox"/>
	30-39 yrs	<input type="checkbox"/>
	40-49 yrs	<input type="checkbox"/>
	50-thereafter	<input type="checkbox"/>

YOUR GENDER:	Male - Female	<input type="checkbox"/>
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YOUR HIGHEST NURSING QUALIFICATION:		
	Hospital Based Certificate of Nursing	<input type="checkbox"/>
	Diploma of Nursing	<input type="checkbox"/>
	Degree in Nursing	<input type="checkbox"/>
	Graduate Diploma in Nursing	<input type="checkbox"/>
	Masters	<input type="checkbox"/>
	Other .....	<input type="checkbox"/>



**EDUCATION COURSES ATTENDED BY YOU:**

College of Nursing - Clinical Teaching .....

College of Nursing - Other .....

University Based Courses .....

Hospital/ Area Based Educational Courses .....

Other .....

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**LENGTH OF TIME IN YOUR PRESENT JOB:**

1 - 6 months

7 - 12 months

1 - 2 years

3 - 5 years

6 - 20 years

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**LEVEL OF RESPONSIBILITY, YOU HAVE:**

1 Ward / Unit

2 - 5 Wards / Units

5 - ? Wards / Units .....

Other (ie TENS / New Graduates / Orientation) .....

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**YOUR DIRECT LINE MANAGEMENT TO: (On a Day to Day basis)**

Nursing Unit Manager

Manager of Area

Head of Nursing Education

Director of Nursing

Other .....

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## **APPENDIX TEN**

### **2nd Round Competencies Statistics**

COMPETENCY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTAL	MEAN	MEDIUM	MODE	STANDARD DEVIATION
1	5	5	5	5	5	5	4	5	5	5	5	5	5	5	69	4.92	5	5	0.267261242
2	3	4	5	5	5	5	5	4	5	5	5	5	5	5	66	4.71	5	5	0.611249846
3	5	5	5	5	5	4	5	5	5	5	5	5	5	5	69	4.92	5	5	0.267261242
4	2	4	5	5	5	3	4	4	4	5	5	4	5	5	60	4.28	5	5	0.913873533
5	5	3	5	5	5	4	4	5	5	5	5	5	5	4	64	4.57	5	5	0.633323694
6	4	3	4	5	4	5	5	3	4	5	4	5	5	4	62	4.42	4	5	0.726273039
7	5	4	4	5	5	4	5	3	4	5	5	5	4	3	60	4.28	5	5	0.744946344
8	4	4	5	5	4	4	4	5	5	5	5	5	4	4	64	4.57	5	5	0.518874522
9	4	5	4	5	5	4	5	4	5	5	4	5	5	3	63	4.5	5	5	0.650443636
10	4	4	4	5	5	4	5	4	4	5	4	5	5	3	61	4.35	4	4	0.633323694
11	5	4	4	5	5	4	5	4	3	5	4	5	4	3	59	4.21	4	4	0.726273039
12	5	4	4	5	5	5	5	3	4	5	5	5	5	3	62	4.42	5	5	0.759554525
13	5	4	4	5	5	4	5	4	4	5	5	5	5	4	64	4.57	5	5	0.513552591
14	5	5	5	5	4	4	4	5	5	5	5	5	5	5	68	4.85	5	5	0.425815314
15	5	3	4	5	4	3	5	4	4	5	4	5	5	4	60	4.28	4	5	0.726273039
16	2	4	4	5	5	3	4	5	5	5	5	5	5	4	64	4.57	5	5	0.928782732
17	5	4	3	5	3	5	4	3	3	5	4	4	4	3	54	3.85	4	4	0.82874193
18	5	4	4	5	3	5	4	4	4	5	4	5	5	3	60	4.28	4	5	0.726273039
19	4	5	4	5	3	4	4	4	4	5	5	5	5	4	62	4.42	4	5	0.633323694
20	5	5	4	5	4	4	5	4	4	5	5	5	5	4	63	4.5	5	5	0.513552591
21	4	5	5	5	4	5	4	5	4	5	5	5	5	4	66	4.71	5	5	0.497245158
22	4	4	4	5	4	5	4	5	4	4	5	5	4	3	60	4.28	4	4	0.611249846
23	5	4	4	5	4	5	4	5	4	5	5	5	5	3	62	4.42	5	5	0.650443636
24	3	4	4	5	4	5	4	3	5	5	5	5	5	3	62	4.42	5	5	0.825420306
25	5	4	4	5	5	4	3	4	4	4	4	5	4	3	56	4	4	4	0.662993544
26	5	4	4	5	5	5	5	5	4	5	4	5	4	4	60	4.28	5	5	0.513552591
27	5	4	4	5	5	3	4	5	5	5	4	5	5	3	62	4.42	5	5	0.755928946
28	5	5	4	5	5	4	4	4	5	5	4	5	5	3	63	4.5	5	5	0.650443636
29	5	4	4	5	4	4	5	5	3	4	4	5	5	3	60	4.28	4	5	0.726273039
30	5	4	4	5	3	3	4	4	3	5	4	4	4	3	55	3.92	4	4	0.730045912
31	5	5	4	5	4	4	5	5	4	5	5	5	4	4	63	4.5	5	5	0.513552591
32	5	4	4	5	5	2	4	5	4	4	4	5	4	4	57	4.07	4	4	0.801783726
33	4	5	5	5	3	5	5	5	4	5	5	5	5	3	67	4.78	5	5	0.755928946
34	3	4	5	5	3	3	5	4	3	4	5	5	5	3	58	4.14	4	5	0.916874768
35	5	5	4	5	5	3	4	4	3	4	4	5	4	3	54	3.85	4	4	0.770328887
36	3	2	5	5	4	3	3	4	4	5	4	5	5	3	58	4.14	4	5	0.997248963
37	3	1	5	1	4	5	2	4	4	4	1	3	5	2	44	3.14	4	4	1.511857892
38	4	4	4	5	4	4	5	5	4	4	5	5	4	4	61	4.35	4	4	0.497245158
39	4	5	5	5	4	3	3	4	4	4	5	5	4	3	58	4.14	4	4	0.770328887
40	3	5	5	5	4	3	4	5	4	4	5	5	4	3	61	4.35	4	5	0.801783726
41	3	4	4	3	3	2	3	5	4	4	3	5	4	3	50	3.57	4	4	0.851630627

## **APPENDIX ELEVEN**

### **2nd Round Pre Requisites Statistics**

Pre Requisite	1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTAL	MEAN	MEDIUM	MODE	STANDARD DEVIATION
1	5	5	5	5	5	5	5	5	5	4	5	5	5	5	69	4.92	5	5	0.267261242
2	5	4	5	5	2	5	4	5	5	5	1	4	5	4	59	4.21	5	5	1.251372872
3	5	4	4	5	4	4	2	5	3	5	4	3	5	4	58	4.14	4	4	0.916874768
4	3	3	4	5	2	3	3	3	3	5	2	2	1	3	49	3.5	3	3	1.109400392
5	1	3	2	3	2	1	2	3	2	1	2	2	1	3	28	2	2	2	0.784464541
6	3	3	4	3	4	3	2	5	4	4	4	3	3	3	48	3.42	3	3	0.755928946
7	3	4	2	3	4	2	2	3	3	4	3	3	4	3	43	3.07	3	3	0.730045912
8	3	4	2	3	1	2	3	3	2	3	3	5	4	3	41	2.92	3	3	0.997248963
9	1	2	2	3	1	1	2	2	4	1	1	3	1	3	27	1.92	2	1	0.997248963
10	3	2	4	3	3	1	3	3	4	3	2	3	2	3	39	2.78	3	3	0.801783726
11	3	4	2	3	4	3	4	3	4	4	3	4	4	3	48	3.42	4	4	0.646206173
12	3	4	2	5	2	3	4	3	4	3	3	3	2	3	45	3.21	3	3	0.864437822
13	1	2	2	3	1	2	2	2	2	1	2	2	2	3	27	1.92	2	2	0.615727926
14	3	4	3	3	2	2	3	2	3	3	3	4	4	2	41	2.92	3	3	0.730045912
15	5	5	5	3	3	3	5	5	3	5	4	4	4	5	59	4.21	5	5	0.892582375
16	5	4	4	3	3	4	3	5	3	5	5	3	5	4	56	4	4	3	0.877058019
17	4	2	3	5	4	5	2	2	3	4	4	3	3	3	47	3.35	0-3	3	1.008208072

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